

Universidad Cardenal Herrera-CEU

Departamento Derecho Privado y Disciplina Jurídicas Básicas



An Economic Personalist Perspective on Human Capital: A Compared Anthropological Interpretation

TESIS DOCTORAL

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VALENCIA

2010

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Sintesi

Il nostro lavoro espone in sequenza: una presentazione del tutor professor Stefano Solari, una prefazione, un'introduzione, un corpo del testo suddiviso in tre sezioni, una conclusione e un'*appendice empirica*. Quest'ultima è, di fatto, un piccolo elaborato *a sé stante* corredato da un'introduzione e una conclusione ma si collega strettamente alla parte principale della tesi perché costituisce un'*applicazione concreta* degli impatti derivanti dalla valutazione del capitale umano in una prospettiva etica personalista.

La *presentazione del Tutor* è diretta a inquadrare la tematica di ricerca esaminata cercando di cogliere qual è stato il *metodo* utilizzato e in quale *spazio* questo elaborato si inserisce nella letteratura economica. Il professor Solari, che ha seguito a passo a passo la redazione del testo, fornisce al lettore alcuni suggerimenti per individuare i punti di forza e i limiti dell'argomentazione e soprattutto tener conto dell'*apporto originale* che l'argomentazione offre.

La *prefazione* vuole delineare quale sia stato il *contesto personale e comunitario* in cui questo elaborato ha preso forma. Come da indicazioni della commissione per il conseguimento del *Diploma de Estudios Avanzados* di questo dottorato, abbiamo cercato di enucleare le modalità con cui è sorta e si è sviluppata l'idea di dedicare questi tre anni di ricerca alla tematica del capitale umano.

L'*introduzione* cerca, invece, di orientare più dettagliatamente il lettore sui contenuti presenti nel nostro lavoro attraverso uno *schema interpretativo*. In questa parte di elaborato poniamo l'accento sui criteri operativi che abbiamo adottato per selezionare le scuole di pensiero economico analizzate e mettiamo in luce gli aspetti più originali della trattazione. Infine, focalizziamo il *nesso* tra il nostro lavoro di ricerca economica e la proposta culturale del progetto "Uomo-Polis-Economia" promosso dallo *Studium Generale Marcianum*. In altre parole, si cerca di chiarire che la concezione antropologica *unitaria e integrale* del soggetto umano costituisce la base per l'individuazione dei nessi tra le diverse discipline del sapere e la teologia e, nel caso specifico del capitale umano soprattutto tra economia e teologia.

La *prima sezione* si occupa di identificare la concezione di capitale umano presente nelle teorie della scuola classica. Ci si concentra così nella visione della scuola classica italiana in cui l'obiettivo dell'economia coincide con la felicità pubblica, in quella classica inglese in cui coincide con la ricchezza della nazione, in quella classica francese socialista in cui coincide con l'esaltazione dell'uguaglianza sociale, in quella classica francese liberale in cui coincide con

l'enfaticizzazione della libertà economica, in quella marxista in cui coincide con il conseguimento della giustizia sociale. In particolare, ci si sofferma su alcuni autori, primo tra tutti Adam Smith, che hanno valorizzato il fattore del capitale umano al punto da farlo divenire il *fulcro* delle loro teorie.

La *seconda sezione* è deputata all'analisi dell'evoluzione che il concetto di capitale umano ha subito con l'avvento della rivoluzione marginalista. Si descrive, dunque, la concezione antropologica insita nelle teorizzazioni degli autori appartenenti al marginalismo inglese e a quello austriaco, mentre si descrive puntualmente la teoria sul capitale umano operata dalla scuola marginalista di Chicago. Su quest'ultimo spunto si evidenzia la letteratura che ha anticipato il celebre trattato di Gary Becker intitolato "*Human Capital*" (1964) e quella che in qualche modo l'ha sviluppato. In questa sezione si conclude proponendo i principali approcci sul capitale umano *alternativi* all'impostazione marginalista. Si tratta di approcci che non informano una scuola perché divergono tra loro sensibilmente sia per metodo sia per scopi ma vengono raggruppati nello stesso capitolo perché divergono dalla letteratura prevalente basata sul metodo marginalista e il paradigma microeconomico dell'"*homo oeconomicus*".

La *terza sezione* è caratterizzata dalla distinzione filosofica tra, da una parte, il concetto d'individuo umano e il paradigma di "homo oeconomicus" e, dall'altra, tra il concetto di *persona* umana e il paradigma di "homo socio-oeconomicus et agens". Siccome il concetto di *persona* è storicamente legato all'apporto culturale del Cristianesimo, si prendono in considerazione gli scritti dei principali economisti cattolici dalla fine del diciannovesimo secolo a oggi. Riprendendo la *tradizione aristotelico-tomista*, gli economisti cattolici svilupparono una diversa configurazione *alternativa* della scienza economica sia al *mainstream* sia agli altri approcci visti alla fine della sezione precedente. Infatti, per gli economisti cattolici l'economia è una scienza "pratica" basata sul "giusto mezzo" aristotelico, inserita in una tommasiana visione organicistica della realtà, ed eticamente orientata dalla moralità (non dal moralismo) dell'avvenimento cristiano verso il bene comune. Le loro argomentazioni vengono riprese dalle encicliche sociali dei Papi che costantemente affermano il primato della *persona* sul capitale.

Infine, la *conclusione* riprende sinteticamente le varie posizioni sul capitale umano descritte e discusse nell'elaborato cercando di confrontarle tra loro secondo una *tassonomia*. Ovvero, si individuano fundamentalmente delle categorie argomentative in base a cui sono raggruppabili le teorie dei diversi autori. La prima si fonda sul concetto d'individuo umano e di "homo oeconomicus", assume una configurazione di capitale umano come stock di conoscenze

tecnico-operative, strumento di controllo sociale e investimento strettamente economico. La seconda si basa sul concetto di persona umana e di “homo socio-oeconomicus et agens”, pone attenzione all’educazione integrale del soggetto e sostiene lo sviluppo organico della società mediante la pratica di comportamenti virtuosi delle persone, conseguenza dell’interiorizzazione di valori etici e morali.



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Academic year 2010-2011

European Doctorate Programme

La Sociedad Plural

Presentation letter

PhD dissertation of Luca Sandonà

The dissertation of Luca Sandonà, entitled *An Economic Personalist Perspective on Human Capital: A Compared Anthropological Interpretation*, consists of a historical and theoretical analysis of the evolution of the notion of *human capital* in political economy. This study can be included in the contemporary field of “economics of education”, but its broad and critical perspective makes it a more pervasive and ambitious essay. Its aim is to work out an economic view of human capital that is consistent with the Catholic gospel and the social doctrine of the Roman Catholic Church. From this perspective, the wide review of political economy theories functions as a rich illustration of the evolving views of the role of education and professional training in the history of economics. The thesis proposed in this dissertation is that the contemporary economic orthodox view of human capital is rather poor compared to many conceptions proposed in the past. On the other hand, a vision of human capital more in line with Christian anthropology would require a change of epistemology that many economists are reluctant to make. In particular, the Personalist conception of human capital is based on a view founded in a non-materialist and relational perspective of society and the economy. This perspective specifically underlines the role of moral values and the role of the “sense of community” in the appreciation of human capital. Moreover, the fundamental point made in Sandonà’s work is that of interpreting human capital as a complex set of human attributes and not as a simple quantitative stock.



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Consequently, reductive and reductionist conceptions of human integral upbringing are seen as seriously deceptive for any theorisation of human behaviour.

The dissertation unfolds by first presenting some *ante litteram* conceptions of human capital in the history of economic thought; then, it develops the human capital view of the Personalist school, connecting it back to the genesis and progress of Social Catholicism in political economy. Sandonà makes a special effort to connect the development of economic theory by Catholic economists with the progression of the social doctrine of the Church, while also highlighting the contributions of the popes in the last century. Finally, in the appendix of the treatise, Sandonà enters the tricky field of the empirical assessment of human capital from as complex a perspective as that of Personalism.

The analytical framework of this dissertation is based on the conceptual realism strictly framed by the anthropology of Catholicism. This epistemology derives from the broad Aristotelian-Thomist perspective traditionally adopted by scientific Catholicism for the study of social matters. Sandonà, in particular, adopts the more specific perspective of Personalism, which owes much to the philosophical (and theological) studies of John Paul II. The consequence is that, contrary to positivistic theories, this approach explicitly adopts value judgements concerning what is morally good for a person and for the economic system. This allows the author to adopt a broad and realistic view of what a *good upbringing* is and of which element of education is most “productive” for the single person as well as for society. In this perspective, a fundamental assumption is that individual good is only hypothetically, not practically, separable from the common good. From this hypothesis, the author derives the role that values, relationships, reciprocity and altruism (without forgetting common faith) play in the formation of the stock of human capital.

The interesting point underlined in the dissertation is that some of these elements have been considered relevant by many classical economists. They were considered essential by some Italian economists of the 18th century, who were still under the influence of broadly-intended Aristotelianism. Eventually, at the end of the 19th century, this view became minoritarian, and the ethical elements were dropped from theorisation for the sake of positivistic and formalized theories. More recently, the “re-



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invention” of human capital, due to the Chicago school at the middle of the 20th century, had the merit to re-focus the attention of economists on education and professional training. On the other hand, scholars inspired by the Chicago approach, imbued with the positivistic spirit of the times, adopted a somewhat individualistic and materialistic conception of human capital, dropping from their theories and empirical tests the essential elements that actually help build a collaborative community and a well-performing economy.

The dissertation is based on a large number of references, and from this point of view, it is more an extensive work on the literature in search of the different uses of the concept of human capital rather than an intensive search for a specific theorisation of this notion. As a consequence, the literature reviewed is quite broad. Moreover, we should underline how the author considers also a number of scholars and works which are not widely known also to specialists (e.g. Cardinal Pavan). Obviously, many important scholars are missing from this dissertation, but this fact has not affected its capacity to propose a complete and organic picture of the subject. Similarly, there are also some missing links from this reconstruction of the evolving conceptions of human capital. It is the role of John Dewey’s pragmatic revolution in pedagogy and its influence on economics as well as the role of the contemporary heterodox theories of the firm that connect Hayek’s knowledge theory with the Schumpeterian conception of the entrepreneur (competence-based approaches from Penrose to the idea of dynamic capabilities). This, however, would have been quite a demanding task relative to the aims of the author, who tends to focus on the connection between classical theories and the Personalist perspective.

The argumentation is complete and coherent throughout the work. Theoretical elements are presented in detail, while the precision of the reasoning is obviously limited by the non-perfect comparability of the different theories analysed in this work.

We can conclude that the thesis is relevant and innovative. Its originality lies in the way it breaks with contemporary conventionalism by searching for human capital in past contributions. Its strength is the delicate connection between economics and the Catholic gospel in this specific field of inquiry—rather under-analysed thus far. The thesis emerges clearly and boldly from the text. The knowledge expressed in this



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dissertation is at the same time respectful of traditions and provocatively in opposition to the intellectual mimetism of contemporary labour economics. It builds from achieved economic theories and from Social Catholicism and Personalism, building bridges between formal modelling and more “practical” economic science without refusing to dialogue with orthodox economic thought. As a consequence, this work surely contributes to the increase of our knowledge in this field of economics.

Padova, October 5, 2010

The tutor,
Prof. Dr. Stefano Solari
*University of Padua,
Department of Economic Sciences*

Prefazione

Questo lavoro inizia dal settembre del 2007 con l'inizio dei corsi della scuola di dottorato "La Sociedad Plural" promossa dall'università "CEU Cardenal Herrera" di Madrid in collaborazione con lo "Studium Generale Marcianum" di Venezia. Tuttavia, la ricerca ha trovato l'*input* nel discorso per la festa del Redentore pronunciato dal Patriarca di Venezia nell'estate del 2006. In quell'occasione il cardinale Scola propose un'acuta riflessione sul tema "Educare in una società in transizione". Le argomentazioni a favore di un processo di *crescita integrale* della persona all'interno di un *contesto comunitario* provocarono, e non poco, le mie convinzioni di orientamento individualistico formati durante gli studi nella facoltà di economia. A quel tempo, ero convinto che l'educazione coincidesse esclusivamente con l'accumulazione di nozioni e abilità da applicare nel lavoro per percepire una retribuzione. Non davo perciò ascolto ad alcuni amici, con cui condividevo il cammino dell'esperienza cristiana, secondo cui l'educazione consisteva nella "*introduzione alla realtà totale*"¹ (Jungmann, 1939: 20). Prevaleva in me una *dicotomia* inesorabile: da una parte c'era lo studio, spesso noioso, delle materie economiche e dall'altra c'era il tempo libero da impiegare per i miei hobby e, talora, per la mia crescita spirituale. Del resto, i libri di economia che ero costretto a studiare mi inducevano a questa *forma mentis* così come la maggior parte delle frequentazioni che intrattenevo in facoltà con i docenti e i colleghi erano animate dal principio egoistico decantato da Adam Smith. Insomma, avevo studiato l'essere umano come un "*homo oeconomicus*" e poi ne avevo più volte sperimentato la veridicità direttamente nella mia esperienza relazionale. Ovviamente, sto generalizzando perché anche nella facoltà di economia si incontrano dei professori umanamente straordinari e dei compagni di corso molto in gamba.

In secondo luogo, mi sembrava il classico tentativo di "tirare acqua al proprio mulino" l'esortazione del Patriarca di creare un sistema istituzionale in cui in nome

del principio di *sussidiarietà* le scuole e le università private potessero concorrere con quelle pubbliche nel mercato educativo sulla base di una vera possibilità di scelta della famiglia dell'educando, cioè senza costringere i genitori a pagare una retta oltre al contributo che già sostengono allo Stato per il servizio di istruzione tramite la fiscalità ordinaria. Ciò che non mi convinceva non era la competitività che si sarebbe venuta a creare, poiché da economista ero stato formato a valorizzare sempre il principio di concorrenza, quanto all'idea che nell'arena pubblica si potessero confrontare liberamente proposte culturali alternative. Personalmente, ero convinto che ciò mettesse a repentaglio l'oggettività della conoscenza poiché sostenevo che la scienza, compresa quella economica, avesse un connotato di incontrovertibilità che solo un *approccio neutrale* ad essa poteva garantire. Su questo punto, ossia la neutralità della conoscenza, le parole del Patriarca in una *lectio magistralis* (2007b) all'università "Cattolica" di Milano operarono in me un radicale cambio di veduta. Infatti, il cardinal Scola mi persuase che ogni approccio educativo, anche quello che si autodefinisce neutrale, presuppone un *impianto valoriale* che lo informa. La neutralità in sé non esiste poiché essa stessa è un'affermazione di verità. In particolare, la verità dello scientismo consiste nel sostenere che non esiste una verità metafisica poiché l'unica verità possibile è quella legata alla dimostrabilità empirica di una proposizione. In campo economico lo scientismo si è tradotto in un positivismo articolato sulla base di una filosofia utilitarista secondo cui qualsiasi azione umana, anche quella non strettamente economica, è ispirata dal conseguimento di un tornaconto. In questi termini si esclude l'esistenza dei *giudizi di valore* sulle azioni poiché si presume che l'unico valore sia l'utilità (Zamagni, 1994: 62). Al contrario, se si pensa al giudizio che un aspirante sposo emette sulla bontà per la sua vita della relazione amorosa con la futura sposa (Richi Alberti, 2004: 16) si constata che il giudizio di valore è un fattore concreto che inerisce al processo decisionale.

Una volta sfatato il mito della neutralità, ho quindi abbracciato in pieno la proposta del Patriarca sulla questione educativa e ne ho fatto l'oggetto della mia

¹ La citazione tedesca originale è "*Eine Einführung in die Gesamtwirklichkeit.*"

tesi di laurea specialistica sotto la guida del professor Danilo Bano nell'estate del 2007. Solo qualche giorno dopo la discussione la Provvidenza ha voluto che mi fosse proposto di partecipare alla prima edizione del programma di dottorato europeo "*La Sociedad Plural*" per cercare di andare più a fondo di ciò che nella tesi avevo un po' tratteggiato. In seguito all'incontro con i qualificati relatori dei corsi di dottorato frequentati si rendeva chiaro in me il desiderio di dedicare la tesi di dottorato alla tematica del *capitale umano*, ovvero all'importanza dell'essere umano nella dinamica di formazione del valore economico. Si trattava, però, di affrontare la tematica con quello *sguardo unitario* al sapere di cui Papa Benedetto XVI parlò nel suo discorso all'università di Ratisbona nel settembre del 2006 e di cui l'attività del progetto interdisciplinare "Uomo-Polis-Economia" dello *Studium Generale Marcianum* ha costituito un felice tentativo concreto (Richi Alberti, 2007a, 2007b, 2008a, 2008b, 2009, 2010; Goggi, 2009; Sandonà Le., 2010; Sterpini, 2010). Dovevo fare uno sforzo non da poco perché mi era richiesto di avanzare un discorso economico con una *ragione allargata* alle conoscenze degli altri campi del sapere, primo tra tutti la teologia. Ciò significava scontrarsi fin da subito con la prevalente letteratura accademica che fa dell'economia una scienza auto-referenziale e auto-sussistente.

Tuttavia, la Provvidenza mi ha dato una mano. Infatti, la sapiente guida e la testimonianza cristiana di monsignor Gabriel Richi Alberti mi hanno permesso di scoprire la "dignità culturale" del Cristianesimo. Nonostante fin da piccolo avessi ricevuto una fervida fede, non avevo mai compreso che la fede fosse un metodo di conoscenza. Meglio, ritenevo che la fede avesse qualcosa da dire per certe branche del sapere, come per la letteratura e la filosofia, ma che non potesse inerire la disciplina economica. Eppure, l'esperienza personale nelle relazioni sviluppate negli ambienti del *Marcianum* e nella compagnia di alcuni amici mi erodeva pian piano questa mia certezza. Senonché proprio al *Marcianum*, ritrovo una ragazza che avevo incontrato a una cena un anno prima e non avevo mai più rivista. La ricordavo perché era carina e anche perché in quella cena mi aveva parlato della sua tesi di laurea in filosofia sul proceduralismo etico di Jürgen Habermas. Guarda

caso, nel luglio 2005 avevo letto un'intervista di Aldo Cazzullo al cardinal Scola sul *Corriere della Sera* in cui il Patriarca indicava in Habermas un filosofo con cui, al di là delle divergenze, si poteva convenire sulla necessità di un confronto a 360° tra uomini religiosi e non. Non sapevo chi fosse Habermas, né cosa sostenesse, ma per la stima che da sempre nutro nei confronti del Patriarca mi fidavo che fosse un interlocutore interessante. In ogni caso, non potevo che rimanere stupito da una studentessa di filosofia che non facesse trasparire di essere fortemente di sinistra e fortemente anticlericale come tutte le altre studentesse di filosofia che avevo conosciuto a Venezia. Ritrovata al *Marcianum* un anno dopo questa ragazza stava scrivendo la tesi della laurea specialistica sui limiti della visione delle fedi di Severino alla luce dell'enciclica *Fides et Ratio* (1998) di Papa Giovanni Paolo II. Con lei iniziò un dialogo fecondo sul rapporto tra fede e ragione, tra fede e scienza, tra fede e vita. Due anni e mezzo dopo, abbiamo deciso di presentarci all'altare assieme per ricevere il *sacramento matrimoniale*.

Infine, sempre la Provvidenza ha voluto che in un convegno del maggio 2008 conoscessi il professor Stefano Solari dell'università di Padova. Questi mi colpì molto perché non mi era capitato spesso di incontrare professori di economia che rispondessero gentilmente e prontamente alle mail. Guarda caso nell'autunno successivo Solari insegnava come supplente di "Scienze delle Finanze" all'università Ca' Foscari di Venezia dove facevo da assistente al corso di "Etica Economica" tenuto dal professor Bano. I nostri orari facevano sì che talvolta ci trovassimo per caso al bar vicino alla facoltà e così cominciammo un po' a parlare e si creò un'*amicizia culturale e cristiana*. Al professor Solari devo moltissimo: la testimonianza concreta che si possono produrre qualificate pubblicazioni scientifiche in economia ancorandosi all'antropologia cristiana; la direzione nella pubblicazione di alcuni miei articoli e nella redazione di questa tesi di dottorato; i suggerimenti sulle letture da svolgere e sugli autori da approfondire; le indicazioni di stile sulla presentazione delle note, della bibliografia e della impostazione grafica del testo; l'invito a imparare bene l'inglese e a leggere e scrivere in inglese per presentare elaborati che hanno un valore a livello internazionale. Per imparare

l'inglese ho così pensato di andare nella patria dell'economia: gli Stati Uniti. L'amico professor Felice, conosciuto per caso in internet, mi ha suggerito la città di Washington DC dove lui stesso aveva svolto un soggiorno anni addietro. Così grazie al professor Stephen Schneck, relatore al convegno sulla "Società Plurale" organizzato dal Marcianum nel settembre 2009, ho potuto essere accolto come *Visiting Scholar* alla "Catholic University of America". Lì e durante un periodo a New York ho avuto modo di conoscere personalmente alcune grandi personalità del mondo culturale cattolico americano come il cardinal Francis Eugene George O.M.I. di Chicago, presidente della conferenza episcopale americana, il filosofo Charles Taylor, il filosofo Alasdair MacIntyre, il sociologo Robert Royal, il teologo George Weigel, il politologo Michael Novak, e molti economisti come Charles Clark, Edward O'Boyle, John Davis e Daniel Finn. E sempre lì ho ricevuto l'insperata bella notizia dell'erogazione di un sostegno finanziario all'ultimo anno della mia ricerca da parte della Fondazione Ispirazione di Treviso che, in un periodo di forte crisi economica, ha avuto il coraggio di *investire concretamente* risorse finanziarie su un giovane studioso cattolico.

Insomma, in questi tre anni di dottorato sono accaduti molti *fatti*: mi sono sposato, ho incontrato grandi personalità cattoliche, ho capito che la fede è un *metodo di conoscenza* e che fede e ragione sono complementari, ho imparato una concezione antropologica *integrale* e *unitaria* dell'essere umano, ho sviluppato alcune amicizie che, senza dubbio, sono state decisive per orientare la mia vita e cogliere la *bellezza* della proposta cristiana. Si tratta di un itinerario che questa tesi di dottorato in qualche modo racconta tra le righe poiché, come qualsiasi altro economista (anche se non lo ammette), parlo di economia a partire dalla mia esperienza personale della realtà. Sul mio sguardo incidono moltissimi fattori contingenti, educativi, sociali ma incide e spero inciderà sempre di più la memoria della risurrezione di Gesù Cristo.

Introduzione

Pur mantenendo fede allo *statuto epistemologico* della disciplina economica, come la modalità di indicare i riferimenti bibliografici dimostra, questo lavoro si caratterizza per un'*interdisciplinarietà* tra economia e altre scienze e tra diversi settori scientifico-didattici dell'economia. La prima tipologia di interdisciplinarietà è presente in tutto il testo e cerca di tradurre concretamente la sfida lanciata dal progetto di dottorato "*La Sociedad Plural*". Siccome il soggetto umano è un essere *unitario* occorre considerarlo in tutte le sue diverse sfumature ma senza ridurlo ad un oggetto di indagine scomponibile a scompartimenti stagni. Allo stesso modo il sapere è *unitario* e, pur potendo o addirittura dovendo prenderlo in considerazione a parti circoscritte, non si deve ultimamente tralasciare il suo carattere indivisibile. In proposito, ci sembra prezioso citare un lungo estratto della prolusione del cardinal Scola in occasione dell'inaugurazione dello *Studium Generale Marcianum* del 24 aprile 2004. Il Patriarca di Venezia affermò:

Pur non pretendendo di portare rimedio alla odierna frammentazione dell'oggetto del sapere – questione complessa connessa con il problema epistemologico della necessaria demarcazione delle varie discipline – essa (la proposta del Marcianum) non rinuncia a perseguire con tenacia l'unità del sapere stesso. Cosa si intende per unità del soggetto del sapere e quali fattori è necessario mettere in atto per attuarla? In proposito mi sembra opportuno fare riferimento anzitutto a due fondamentali proprietà costitutive dell'umana ragione intesa qui nella sua accezione più larga come plesso di tutti i fattori di "apprensione" e di "affezione" che coinvolgono l'uomo "uno di anima e di corpo" (GS: n°14). Queste proprietà sono l'apertura integrale e la ricettività. Nella conoscenza la ragione

si rivela anzitutto capace di un'apertura integrale nei confronti dell'oggetto. Essa è veramente in grado di adeguare la realtà ("adequatio rei intellectus", Tommaso). Si attua qui il livello più elementare della verità. Non si dà verità senza questo sguardo integrale. Scrive il giovane Wojtyla nel dramma "Fratello del nostro Dio": "Non si può pensare soltanto con un frammento di verità, bisogna pensare con tutta la verità". Quanto alla seconda proprietà della ragione, la ricettività, mi piace citare un illuminante passo di Balthasar "Ricettività dice il restare aperti (della ragione) per qualcosa d'altro ... significa avere finestre per tutto ciò che esiste ed è vero. Ricettività dice il potere e la possibilità di ricevere in casa propria una realtà estranea e per così dire ospitarla". Con una bella metafora la ricettività viene definita, in ultima analisi, come la "capacità di farsi regalare da quest'esistente la sua propria verità". Questa ricettività non è affatto passività ma, al contrario, è l'espressione dinamica del "selvaggio e vivo intelletto dell'uomo", per utilizzare un'efficace formula del Card. Newman. Se la ragione in senso pieno è in grado di ospitare il reale, allora una capacità di unità è insita, in un certo senso a priori, nel soggetto personale. Colui che riceve, anche se i doni sono molteplici, possiede in se stesso la risorsa per accoglierli. Essa consiste nella capacità di unificarli. Ricevo, trattengo, e quindi imparo, se unifICO. Le naturali proprietà di integrale apertura e di ricettività offrono alla ragione la possibilità di elaborare un principio unificatore vitale – la parola "principio" non va ridotta intellettualisticamente – per affrontare la realtà nella variegata gamma delle sue espressioni. In forza di tale principio sintetico ogni uomo, fin dalla prima infanzia, può cominciare ad imparare per poi perfezionare le sue conoscenze lungo tutta la sua esistenza. L'educazione consiste allora

nell'offrire questo principio sintetico vitale all'oggettiva capacità della ragione libera di ogni persona che, adeguando la realtà, ne riconosce l'intelligibilità. Questo principio non è un'idea astratta ma, lo ribadisco, esige l'armonico sviluppo di tutto l'io. (2004: 24-25)

La seconda tipologia interdisciplinarietà riguarda più da vicino la suddivisione in sezioni dell'elaborato. Infatti, nelle prime tre sezioni lo scritto ha in prevalenza un orientamento di *storia del pensiero economico*. Si passano in rassegna le principali scuole di pensiero lungo la storia cercando di individuare quale concezione di capitale umano promuovessero all'interno delle loro teorie. All'interno del pensiero delle diverse scuole si tenta, inoltre, di demarcare le differenze e le affinità tra i vari esponenti concentrandosi su quelli che introducono argomentazioni più originali. Gli studiosi presi in esame sono sempre economisti in senso stretto, ossia coloro che in gergo tecnico si chiamano studiosi di *economia politica*. Nella quarta sezione, invece, introduciamo la parte *più originale* di questo elaborato riferendoci al capitale umano nella *versione personalista* presente nel pensiero dei principali *economisti cattolici* e nella *Dottrina Sociale della Chiesa*. Infine, nell'appendice empirica proponiamo una digressione su un nostro sviluppo personale del progetto di ricerca "*Venice Human Asset Index*" cui abbiamo partecipato anche su invito della commissione per il conseguimento del *Diploma de Estudios Avanzados* del progetto di dottorato "*La Sociedad Plural*". Si tratta di una riflessione sostanzialmente di *etica economica* sulla base dell'analisi di dati quantitativi.

D'altra parte, questo lavoro presenta un *limite* che vogliamo fin da subito indicare. Esso riguarda la scelta delle scuole di pensiero economico analizzate. Per questioni operative abbiamo deciso di focalizzare le nostre energie sulle principali scuole che nella specifica tematica del capitale umano hanno avanzato qualcosa di *particolarmente significativo*. Non abbiamo esaminato, dunque, alcune scuole di

peniero molto importanti perché nello specifico argomento del capitale umano non hanno prodotto materiale di speciale valore. Per esempio, John Maynard Keynes e gli autori keynesiani hanno prodotto teorie di grande spessore in ambito macroeconomico, ma nelle loro opere non troviamo traccia di interessanti spunti riferibili alla tematica del capitale umano. Del resto, la nostra scelta delle scuole di pensiero da considerare e quelle in qualche modo da trascurare è avvenuta anche tenendo conto delle pubblicazioni di *letteratura secondaria* sull'argomento i cui principali autori sono Mark Blaug, Edwin West e Stefano Spalletti. In proposito, è bene precisare che nel nostro elaborato la letteratura secondaria è utilizzata e citata *nel testo principale* solo quando attiene allo specifico tema del capitale umano mentre viene menzionata *quasi solamente in nota* nel caso di consigli bibliografici per l'approfondimento di altri aspetti della scuola o dell'autore. Leggendo questa tesi si risconterà senza dubbio che sono presenti *notevoli commenti* di letteratura secondaria riguardo ad alcune scuole di pensiero mentre sono *rari*, se non assenti, le valutazioni di letteratura secondaria riguardo ad altre scuole di pensiero. Infatti, questo nostro lavoro ha tenuto conto di tutte le scuole di pensiero esaminate dalla letteratura secondaria disponibile e ne ha *originalmente* introdotto delle altre che la letteratura secondaria non aveva mai analizzato finora, salve pochissime eccezioni. Più precisamente, possiamo dire che le scuole tendenzialmente oggetto della letteratura secondaria riguardanti la tematica del capitale umano sono: la scuola classica inglese, la scuola marginalista inglese, la scuola marginalista di Chicago e gli altri approcci alternativi all'impostazione marginalista. Invece, le scuole che non sono mai state analizzate prima di questo lavoro, salvo, ripetiamo, rare eccezioni, sono: la scuola classica italiana, la scuola classica francese, la scuola marxista, la scuola marginalista austriaca e tutte le scuole rientranti nella quarta sezione sul personalismo economico (dal Cattolicesimo sociale alla scuola dell'economia civile).

Dobbiamo, infine, precisare che cosa *intendiamo* per capitale umano. Come spiegheremo nel testo, questa nozione acquista di fatto una definizione ufficiale nel 1960 con il discorso di Theodore Schultz nella riunione annuale dell'*American*

Economic Association. Ma nel nostro lavoro dimostriamo che più che di una novità si tratta di una formalizzazione di un concetto che è *sempre* stato presente nel pensiero economico, anche se in modo analiticamente meno circoscritto. In ogni caso, nel nostro elaborato per capitale umano intendiamo il ruolo della persona nella dinamica economica sia in termini di *competenze e capacità* sia in termini di apporto *morale ed etico* legato alla *personalità* del soggetto umano. Ci riferiamo, dunque, al concetto di capitale umano per distinguere il “fattore-lavoro” rispetto al fattore del capitale materiale nella funzione di produzione e per indicare all’interno di questo “fattore-lavoro” i fattori psicologici, sociali, etici e religiosi che ne determinano l’operatività e la produttività. In secondo luogo, ci riferiamo al capitale umano per indicare quegli *ideali di vita buona* che determinano il modo di comportarsi e agire degli uomini nella società plurale nella consapevolezza che da essi dipende la modalità della persona di affrontare non solo il lavoro ma anche gli affetti e il riposo (Scola, 2007a). Di conseguenza, nel capitale umano identifichiamo l’esperienza umana elementare che caratterizza ogni uomo e che, come insegna il cardinal Scola (1997: 199-213), si esprima nell’esperienza religiosa e trova compimento nell’esperienza cristiana. Sulla base di questa consapevolezza possiamo dire che, sebbene in forme diverse, l’uomo di duemila anni fa sperimentava le stesse esigenze e coltivava gli stessi desideri dell’uomo contemporaneo. Ecco perché il pensatore spagnolo Eugenio d’Ors diceva giustamente che nell’ambito della riflessione umana “*tutto ciò che non è tradizione è plagio*” (cit. in Richi Alberti, 2009: 128). Ebbene, le circostanze storiche e la Provvidenza ci hanno dato la possibilità di scoprire l’*eccezionale ricchezza* della Tradizione cristiana sull’economia come luogo in cui la persona esprime se stessa tramite le sue azioni (Wojtyła, 1969).

First Section. Human Capital in the Classical School: An Embryonic Concept

Chapter 1.

The Concept of Human Capital in Italian Classical School:

Interiorization of Moral Values and Practice of Civic Virtues.

1. Introduction.

The Italian word “*educazione*” includes the concepts expressed in English by the terms “education” and “training” and even adds the idea of a proposal of a *method of knowledge* for experiencing the philosophical/religious truth of whole reality (Vito, 1962). This terminological difference is important for understanding adequately the particular stress of Italian classical scholars concerning human capital.

The Italian classical economists pointed out the indispensable practice of the good habits and the fundamental application of the civic virtues for developing commerce and increasing wealth in society (Bianchini, 1982). They designed an economic architecture called “civil economics” that was focalized on human person and aimed at achieving “public happiness” (Bruni L., 2003). The concept of public happiness was intended as the material and spiritual satisfaction of the maximum possible number of people. The Italian classical economists promoted the defence of human dignity of every person and praised the valorisation of the un-reducible value of intermediate bodies, such as family, associations, groups, enterprises, and so forth (Roncaglia, 1995). In this way, they highlighted the centrality of *human relations* within community for increasing the well-being of society. On the other hand, for Joseph Schumpeter the Italian classical school of economic thought

dominated «*the field of the pre-Smithian system production*» (1954, p. 176) and for Luigino Bruni and Stefano Zamagni to say economics in XVIII century meant «*necessary to say Italy*»² (2004, p. 71).

However, the Italian classical school is conventionally subdivided into different groups, Meridional, Tuscan, and Lombard-Venetian because Italy was not united at that time.³ The first was mainly concentrated in the city of Naples where a wider cultural illuminist movement existed. The second was led by Sallustio Antonio Bandini⁴ who did not write a specific treatise concerning human capital because he focused his energies on the reclamation of the Maremma marshlands (Nardi Spiller, 1991, p. 376-377). The third included two succeeding generations of scholars who dealt with the topic in different ways.

2. Human Capital in the Meridional Classical School

A lot of important scholars, such as Ludovico Bianchini⁵ and Gaetano Filangieri⁶, belonged to the Meridional group. However, the leading figure was undoubtedly Antonio Genovesi⁷. He was a Catholic priest who taught ethics and moral philosophy at Naples University where later he held the first chair of economics in the world (Michels, 1916). Genovesi developed the mercantilist view of economics by reconciling free competition with protectionist policies in order to solve the economic problems of the people (Fusco, 1988). Indeed, he is famous for his realism, his ability to merge observations and suggestions from diverse disciplines and his desire to improve the quality of life in Naples (Villari, 1958). However, he is also known for not having built a systematic theory. On the other hand, Francesco Ferrara's⁸ criticism of Genovesi as lacking «*elementary ideas*»⁹ (1850, p.

² The Italian original quotation is: “*necessariamente dire Italia.*”

³ Italy became a nation in 1861, although the region of Veneto was included only in 1866.

⁴ Sallustio Antonio Bandini (1677-1760)

⁵ Ludovico Bianchini (1803-1871)

⁶ Gaetano Filangieri (1752-1788)

⁷ Antonio Genovesi (1712-1769)

⁸ Francesco Ferrara (1810-1900)

XXXVI) appears exaggerated. As Ferrara was the most important Italian positivist economist, he probably wanted to emphasise his opposition to the connection Genovesi made between ethics and economics. In fact, Eugenio Zagari explains (2007, p. 7) that Ferrara did not believe that a science which was based on religious and political principles could exist, while Genovesi conceived economics as central in a network of moral values in which human motivation was not reduced to mere self-interest.

Genovesi proposed an interesting *relationship* paradigm in the social context, because he noted that people spontaneously desired to cultivate a connection with others. In his opinion, people get more pleasure when others participate in their satisfactions. Genovesi thus described humans as beings “*ad imago Dei*”¹⁰ –the biblical anthropological conception that the tradition of Catholic theology developed. In other words, Genovesi argued that the Mystery of the Trinity explained the truth of human anthropology. The Christian God is a unique being constituted by three personal entities. The relation of free and mutual love between the Father, the Son and the Holy Ghost is *constitutive*—not integrative or complementary—of the substance of the divine being¹¹. Consequently, Genovesi believed that people are completely themselves only when they live in free *communion* with others (Bruni, Pelligra, 2002). In this sense, the common good of human community is the condition for the fulfilment of every single person. The quality and level of sociality thus constituted an important dimension of public happiness (Zamagni, 2003).

On the other hand, Genovesi’s approach was born of a moderate Enlightenment environment where the salvation of society was considered achievable only by human creativity. This mentality developed the Aristotelian-Thomist concept of economics based on *practical reason* concerning the determination of a series of

⁹ The Italian original quotation is: “*idee elementari.*”

¹⁰ Genesis, 1:27: “*God created man in his image; in the divine image he created him; male and female he created them.*”

moral principles, ethically oriented, which have to be applied to actual situations (Bianchini, 1996; Solari, Corrado, 2009a). But Luigi Taparelli d'Azeglio¹², the founder of *Civiltà Cattolica* and forerunner of Social Catholicism, criticised the Meridional scholars for the underestimation of the *Christocentrism* of the Scholastic tradition in building an ordered society. Taparelli indirectly confused (1854) Genovesi's thought for neglecting the role of Providence in history and later directly attacked it for attaining rationalistic objectives of radical change of society "by competing with the misbelief of the encyclopaedists"¹³ (1857, p. 547). However, in Genovesi's theory, the relationship was not an instrument but an essential presupposition for the economic and cultural growth of people and human communities. Giuseppe Palmieri¹⁴ observed (1792, p. 192) that belonging to a community is an indispensable ingredient for a good life and that without it, a person cannot attain happiness. In his opinion, it was thus better to economically grow less together than to grow more alone.

In other words, the Neapolitan Enlightenment tried to add romantic (Idealism) and rationalist (Enlightenment) ideas to the Greek, Latin and Catholic tradition (Christian Realism). While the ideals of freedom, equality and justice were being popularised in France (Bousquet, 1960, p. 12), the values of care of traditional family and of obedience to the religious and civil authorities were the norm in southern Italy. Moreover, there was a broader cultural movement in Naples during this period represented by Vico¹⁵ in philosophy, Alfonso Maria de' Liguori¹⁶ in morality and Domenico Scarlatti¹⁷ and Giovanni Battista Pergolesi¹⁸ in music. This movement influenced the Meridional economists to prefer *practical publications* to abstract ones (Screpanti, Zamagni, 1989, p. 62). They did not write for pride or

¹¹ For a deep knowledge of this dogma of Christian faith, see the piece of section two, part two of the *Catechism of Catholic Church* approved by Pope John Paul II and officially attached to his Apostolic Constitution "Fidei Depositum" (1992).

¹² Luigi Taparelli d'Azeglio (1793-1862)

¹³ The Italian original quotation is: "gareggiando con la miscredenza degli enciclopedisti."

¹⁴ Giuseppe Palmieri (1721-1794)

¹⁵ Giambattista Vico (1668-1744)

¹⁶ Alfonso Maria de' Liguori (1696-1787)

¹⁷ Domenico Scarlatti (1685-1757)

¹⁸ Giovanni Battista Pergolesi (1710-1736)

erudition, but to solve the problems of the people, who lived in a static world of backward agricultural practices, limited manufacturing and underdeveloped trading. The general populace was uneducated and the land was owned by feudal lords. On which Filangieri affirmed:

*As long as the wealth is owned by few hands, when few are the rich and many the poor, this private happiness of some will not produce the happiness of all; actually [...] it will provoke the collapse of society*¹⁹ (1780-1785, p. 763).

The Meridional scholars thought that the increase in the number of years of education to reduce illiteracy would stimulate the involvement of the general public in economic affairs. They argued that the straightening of the *intermediate bodies* would eliminate the abuse of power by the elite. Genovesi pointed out the integral development of people especially within family, associations, groups, enterprises, and so forth. He stated that “*any state will be wise, rich, and powerful only if there is ‘educazione’*”²⁰ (1765, p. 161). For education and training Genovesi pragmatically believed that was necessary to share men as much as possible by considering that they “*operate for interests*” (1764-1769, p. 94). For a proposal of a method of knowledge of reality Genovesi meant the attainment and realization of good things as recognized by human conscience. This concept of philosophical/religious truth was antithetic to that of Taparelli (1862a and 1862b). The former has a *subjectivist* character and its *content changes* accordingly to different situations whereas the latter has an *objectivist* character and its form of application changes accordingly to different situations but not its content.

¹⁹ The Italian original quotation is: “*finchè le ricchezze si restringono tra poche mani, allorché pochi sono i ricchi e molti sono gli indigenti, questa felicità privata di poche membra non farà sicuramente la felicità di tutto il corpo; anzi ... ne farà la rovina.*”

²⁰ The Italian original quotation is: “*nessuno Stato sarà giammai né savio, né ricco, né potente se non ci sarà educazione.*”

Finally, Genovesi did not agree with the use of Latin for teaching (1764-1769, p. 82). In his opinion, a dead language did not encourage the active involvement of students. As a consequence, in his lessons Genovesi used the vulgar language common in the world of commerce because he wanted people to understand (Vedovelli, 2003). He argued that more knowledge would increase people's capacity to understand reality, reciprocate kindness and dialogue with others (Bruni L., 2000). In his opinion, the 'educazione' is constituted by learning theoretical knowledge in schools, working capabilities in workplaces as well as interiorization of moral values by living within *intermediate bodies*. Here, the trust in community is stimulated by reciprocal beliefs of members. In fact, Robert Putnam explained that in intermediate bodies a psychological mechanism is naturally shaped according to which "*I trust you, because I trust her and she assures me that she trusts you*" (1993, p. 169).

Having people learn about culture and be civically minded constituted the core of the Meridional contributions. Italian economists paid attention to the importance of *civic virtues* in achieving public happiness. Justice, honesty, friendship and trust form the basis of a civic economy. Genovesi argued that the ethical and moral values of every person determine how she works, treats her family and spends her leisure time. Therefore, if the hierarchy of societal values were correct, people would have good morals (Bruni, Sudgen, 2000). On purpose, Genovesi recognized the important role of the state in supporting the spread of civic virtues and building a social system based on good laws, reciprocal confidence, and solidarity. He argued that the specialisation of manpower would increase if "*who produces the better*" (1769, p. 20-22) receives a higher wage. In this way, productivity would increase and competition between factories would be stimulated. The approach of Genovesi to human capital as something strongly influenced by *social capital* was developed by James Coleman (1988) and applied by Stefano Zamagni (2007, p. 71-91) to some games built on the paradigm of reputation.

3. Human Capital in the First Generation of the Lombard-Venetian Classical School

The Lombard-Venetian school was partly influenced by living in a geographic area which was somewhat richer and more developed than in southern Italy. Nevertheless, the final purpose of northern economists was always the achievement of public happiness (Isabella, 2005). The founder of the Lombard-Venetian school was Cesare Beccaria who became famous for his 1764 treatise *On Crimes and Punishment*²¹. He expressed his opposition to the death penalty because it did not allow the perpetrator of the crime to recognise his sin neither did it serve as a lesson for other people, as life imprisonment might have. Beccaria must be remembered for his attempt to further a system of political economy based on Rousseau's social contract theories.

This approach was later strengthened by Pietro Verri, who proposed a *unitary perspective* of politics, economics, sociology and ethics (Porta, Scazzieri, 2002). He defined the objective of his study as the attainment of the “*most possible happiness divided with the most possible equality*”²² (1763, p. 100). How could the people obtain this goal? In Auguste Blanqui's²³ judgment (1882, p. 477), Verri was culturally influenced by the Enlightenment environment of his time and thus emphasised the capacity of human reason and human creativity to create new things for the enjoyment of all (Porta, Scazzieri, 2002). Verri offered (1764) a clear concept of economic equilibrium and understood (1771) that the increase of the balance of payments of a nation was only possible with the state's investment of financial resources in the growth of human capital of people. However, he believed that the public happiness mainly has moral and ethical dimensions (Molesti, 2003, p. 11). On which as the exiled Giuseppe Pecchio²⁴ pointed out (1832, p. 449-450), the northern Italian economic theory was aimed at the attainment of public

²¹ The Italian original title is *Dei delitti e delle pene*.

²² The Italian original quotation is: “*la maggiore felicità possibile divisa colla maggiore uguaglianza possibile.*”

²³ Auguste Blanqui (1805-1881)

²⁴ Giuseppe Pecchio (1785-1835)

happiness in an *organic* view in contrast to the English idea of maximising the wealth of the nation. The former wanted to reconcile moral concerns with profit for an economic system without high social costs, while the latter was exclusively interested in increasing wealth. That did not mean the ideas of the Lombard-Venetian school were not scientifically interesting. In fact, Luigi Einaudi (1953, p. 74) noted that Verri's *Meditations on Political Economy*²⁵ (1771) was the only Italian economic work that Adam Smith²⁶ owned and studied.

As Verri highlighted, human skills and capabilities are decisive factors of trend of economic dynamics. He suggested an active role of state for promoting civic virtue and increasing human capital. Verri stated:

*The clever Minister thus will stimulate the people's curiosity of educating themselves in finance and economics; he will find some chairs because some brilliant teachers will communicate the real principles of public happiness to the young generations ... he will free the press because every citizen could decently express their opinions about the public issues*²⁷ (1763, p. 249).

For this reason Verri thought that politicians must be aware of the fact that their behaviour constitutes an example for other people and their decisions are fundamental for promoting public happiness. In fact, a constant legal reminder of what was good and a constant legal punishment of what was wrong is needed to develop a climate of *trust* among the members of society and towards public

²⁵ The Italian original title is *Meditazioni sull'economia politica*.

²⁶ Adam Smith (1723-1790)

²⁷ The Italian original quotation is: "L'abile ministro adunque fomenterà nel pubblico la curiosità d'istruirsi negli oggetti di finanza e di economia; ne fonderà delle cattedre, accioché nell'istituzione (istruzione) della gioventù uomini illuminati le imprimano i veri principi motori della felicità pubblica ... lascerà libera la stampa, col mezzo di cui ogni cittadino possa decentemente e costumatamente manifestare le sue opinioni sui pubblici oggetti."

authorities. In turn, this confidence would generate *reciprocity*, which would contribute positively to market activity. Daniela Parisi commented that

Verri considered commerce to be an aspect of civil society, an aspect inseparable from others, even analytically; it does not seem that he analyzed it as an autonomous “mechanism” with which to show how the relationship between an individual’s activity and society as a whole is established (1999, p. 474-475).

On the other hand, Paolo Mattia Doria²⁸ expressed his conviction (1729, p. VII) that men have to help each other because they do not manage to learn civic lifestyle alone. This requires an effort because every person does not have a natural disposition to correct others. No one likes to be corrected by others. However, their need is really to be included inside a human community to increase their human capital according to Genovesi’s conception of “educazione”. For Gherardo D’Arco,²⁹ it was thus important to “*show people another way of distinguishing themselves*”³⁰ (1791, p. 39) other than with luxury. As a consequence, the northern Italian economists focused on the creativity of the *human mind*. They tried to develop a social theory characterised by respect for *institutions* and a sense of belonging to community. On which Gianmaria Ortes³¹ used the image of a good economic society as a self-sufficient island³² where “*nobody starts action, engagement or occupation without an input of reason for it*” (1774, p. 43). However, we will point out in the fourth section of this dissertation that human creativity is related to ethics and ethics to anthropology. We will argue that only if

²⁸ Paolo Maria Doria (1662-1746)

²⁹ Gherardo D’Arco (1739-1791)

³⁰ The Italian original quotation is: “*mostrare e accennare alli uomini altra via onde distinguersi infra i suoi simili.*”

³¹ Gianmaria Ortes (1713-1790)

³² The author’s reference to the Italian island near Venice, called Murano, is clear. It was there the author was born and grew up.

man recognises himself as a person he can cultivate affection toward others and contribute to the achievement of Verri's public happiness. Perhaps this connection was considered in the unsystematic works of the northern economists because they lived in an historical and geographical context significantly affected by Catholic faith and classical culture (Molesti, 2006a). Although they were influenced by Enlightenment, Verri and colleagues proposed a combination of the exploitation of human capital (creativity) with the practice of civic virtues in the attempt of increasing the material wealth of the nation (trade of surplus products). This northern conception of human capital seems quite *embryonic* but the insight regarding trust and reciprocity in economic affairs has represented a ground for a succession of interesting analysis³³.

4. Human Capital in the Second Generation of the Lombard-Venetian Classical School

Although there is a chronological boundary line between the two northern Italian schools of thought, the principal difference is the *inversion* of the modality of analysis of human capital. The first group tended to read the importance of human capital between the lines of wider economic topics whereas the second explicitly focused on human capital as the principal factor of economic theories and political activities (Augello, Guidi, 2002 and 2003). That does not mean the second group of scholars concentrated their energies only on this matter, but that they assigned a more important role to human competencies and talents in their general scientific picture. In fact, Giandomenico Romagnosi³⁴ and Carlo Cattaneo³⁵ respectively called their principal works *On the Knowledge Principle as the Principal Factor of*

³³ For instance, Ferruccio Marzano and Fulvio Fontini (1998) demonstrated that reciprocity of human agents causes an economic equilibrium in the market accordingly Paretian-efficiency.

³⁴ Giandomenico Romagnosi (1761-1835)

³⁵ Carlo Cattaneo (1801-1869)

*Political Economy*³⁶ (1836) and *Intelligence as Principle of Public Economy*³⁷ (1861).

They developed Melchiorre Gioja's³⁸ (1815) analysis of the nature of human capital as something *embodied* in workers. Gioja argued that human talents and capabilities increase to a certain level before they diminish like fixed capital. Work-related skills require people to spend time learning specific information about the tasks they need to perform and to practice what they learn (1815, p. 53). In this sense, human abilities were considered the yield of investment in education and as a kind of cognitive richness transmissible between generations. According to Gioja,

*Knowledge of the past and the present generations are dispersed partly in books of science and art, and partly in the heads of practical people and experts*³⁹ (1815, p. 323).

Nevertheless, Gioja's macro level analysis did not distinguish between general and specific human capital and did not examine the formation of human resources or the trend of individual incomes (Spalletti, 2005, p. 172-173).

On this point Romagnosi added (1832) that the role of institutions is decisive for *civilising* society (Albertoni, 1990). He believed that the community was the privileged place where people should live virtuously based on a cultural education and enforce their human capital. Actually, Romagnosi wrote:

³⁶ The Italian original title is *Del principio del sapere come principale fattore dell'economia politica*.

³⁷ The Italian original title is *Del pensiero come principio d'economia pubblica*.

³⁸ Melchiorre Gioja (1767-1829)

³⁹ The Italian original quotation is: "*le conoscenze delle passate e delle attuali generazioni sono disperse in parte nelle opere di scienza e arte e in parte nelle menti degli operatori e degli esperti.*"

*The non defined individual longing for enriching oneself is mitigated, without being enfeebled, by continuous action of well constituted civil society; because if on one side we see the non defined individual selfishness and the intemperance, on the other we see even the participation and the social equality*⁴⁰
(Romagnosi, 1835, p. 9-11).

Romagnosi recognized that moral aspects of community influence values of people (Guidi, Maccabelli, Morato, 2004). Therefore, he was in favour of extending the numbers and the types of schools and of supporting the role of *intermediate bodies* for the integral upbringing of people. The point was to help everyone to discover his/her vocation of labour. In fact, a person automatically increases his/her human capital if he/she does a work that he/she likes (Romagnosi, 1839, p. 174). Indeed, Antonio Scialoja⁴¹ argued that education constituted a deterrent for the tendency of human will to “*rebel against the judgement of common sense*”⁴² (1840, p. 190-191) of human community. He highlighted the connection between education and integral well-being of society by explaining that a person endowed of a good human capital usually improves his/her hygiene, his/her customs and his/her habits (Spalletti, 2006, p. 227). According to Scialoja, the benefits of growth of human capital included the flourishing of hidden capacities of people regarding the innovation of products, the optimization of productive processes, the contribution to social integral well-being to the point that the level of human capital of a man is proved by his creativity of founding “*new means to decrease the number of beggars*”⁴³ (1840, p. 193).

⁴⁰ The Italian original quotation is: “*L’ indefinito individuo che brama di arricchirsi è moderato, senza essere indebolito, dalla continua azione della società svile ben costituita: perché se da una parte notiamo l’ egoismo e l’ intemperanza, dall’ altra notiamo anche la partecipazione e l’ equità sociale.*”

⁴¹ Antonio Scialoja (1817-1877)

⁴² The Italian original quotation is: “*scontrarsi con il giudizio di buon senso.*”

⁴³ The Italian original quotation is “*nuovi mezzi per ridurre il numero di mendicanti.*”

Angelo Messedaglia⁴⁴ (1861-1866) conceived human capital as an intangible asset within a firm that required scientific assessment like material goods. He also conceived human capital as a spiritual element which improves social well-being. This approach denies the complementary character of different disciplines because it divides knowledge into isolated spheres and reflects the idea that facts can be isolated from values (Rangone, 2008). Instead, Cattaneo thought that human capital pervaded all institutions in the social system (Mistri, 2008). He formulated a unique dynamic of wealth flow based on free trade by emphasising the relevance of people's *attitude* toward duty and work. Alejandro Chafuen points out in his 1861 work, Cattaneo discussed how critical human capital is for economic development by emphasising the ultimate origins of it "*in the dark sources of theology*" (2003a, p. 276-277). In other words, Cattaneo recognised the primacy of metaphysical and moral beliefs on economic and financial dynamics because the first always inspires the second (North, 1996). In this context he gave the example of secular intellectuals who attacked the Church during his time. They argued for the existence of a "*triumphant idea*" (Cattaneo, 1861, p. 87) of ethical neutrality of state. But this neutrality is itself an affirmation of truth, i.e. the affirmation that the truth of reality is the absence of a truth or the presence of more subjectivist and relativistic truths. Instead Cattaneo conceived human capital as economic wealth originally constituted by religious, philosophical, ethical, organisational, technical and practical elements. That lead him to classify human "*will and intelligence among the sources of wealth of nations*" (Cattaneo, 1861, p. 63). Giacomo Becattini states that human capital for Cattaneo is

Above all the ability to see, in a something that all people observe and which always been under their nose, something new, unexpected, and promising. This reading of intelligence as the ability to look at customary things and situations and

⁴⁴ Angelo Messedaglia (1820-1901)

perceive in them other, new, possible things and situations, and to build within once mind accessible pathways for one situation to another (2001, p. 22).

Finally, Fedele Lampertico⁴⁵ (1874) and Luigi Luzzatti⁴⁶ (1874) promoted a pragmatic vision of human capital in which appreciation of personal dignity is essential for dynamism of economy (De Rosa, 1996). Their main idea is the conception of labour as a *social value* and an *instrument of civilisation* in the awareness that society is an organic reality where the actions of every person affect the well-being of “*all humanity*”⁴⁷ (Lampertico, 1874, p. 14). Consequently, these authors thought economics as the social discipline of human work and not as the science of the wealth of a nation, although the former does not exclude the latter. Human capital is conceived as the whole of moral values, relational capacities and practical knowledge that a person brings into play in the workplace (Del Vecchio, 1908). Lampertico even highlighted (1875, p. 6-7) the importance of a person’s good will in the realisation of his individual tasks and her honesty in the trades. As the employee and the employer are both people, Lampertico believed (1876, p. 317) that they must give trust reciprocally in the perspective of a fruitful collaboration. On purpose, he formulated the hypothesis of the creation of a common fund among them derived from the industrial net profit of the fixed wage of any worker and a supposed fixed reward of the entrepreneur. Luzzatti tried to formulate *interclassist* proposals of progress “*grounded on responsibility*” (1892, p. 352), such as the institutions of mutual assistance and social insurance, the cooperatives, and the popular banks. In the view of Lampertico and Luzzatti the state should maintain a supplementary profile promoting private initiatives in economic matters but at the same time must guarantee the respect of the law and directly favour public

⁴⁵ Fedele Lampertico (1833-1906)

⁴⁶ Luigi Luzzatti (1841-1927)

⁴⁷ The Italian original quotation is “*intera umanità.*”

education for all (Camurri, 1992). On the contrary, Alessandro Rossi⁴⁸ (1871) was in favour of totally private paternalism where the entrepreneur must supply the adequate responses to workers' needs including those of education and training. However, Gianfranco Tuset (2002) connected the economic boom of northeast Italy after World War II to the implementations of the interclassist theorisations of the authors of the second generation of the Lombard-Venetian school.

5. Conclusions

In this paper we have analyzed the conception of human capital of the most significant Italian classical economists grouped into geographical areas and schools of thought.

Genovesi offered (1765) a great contribution regarding the connection between *social capital* and human capital. He pointed out (1764-1769) that a person performs her innate talents if he/she lives and grows up in a climate of trust, solidarity, and kindness. These factors mainly characterize the intermediate bodies, such as the family, the associations, the enterprises, and so forth. For Genovesi and the other Meridional scholars (Filangieri, 1780-1785) a social reform was thus necessary to reduce the inequalities between rich and poor people but any before the diffusion of moral and ethical values (Christian background) was indispensable to shape good customs in trades. Human capital is conceived as the practice of civic virtues useful for an economy aimed at *public happiness* of all citizens.

On the other hand, Verri (1764) and the other northern authors of the first generation were more concerned with the identification of means morally acceptable which allow the increase of the material wealth of a nation. In this perspective they emphasized the role of *human creativity* for discovering new things and for improving the methods of production in an anticipated version of Schumpeterian entrepreneurship (Verri, 1771). They argued (Verri, 1763; Doria, 1729; D'Arco, 1791) that commerce is not only an economic activity but a political and social one too. As a consequence, they viewed the

⁴⁸ Alessandro Rossi (1819-1888)

moral principles of reciprocity and worthiness as *functional instruments* for attaining common good (Ortes, 1774). The difference between the southern school and the first northern one is basically that the former focused on the development of integral personality of every human being through his/her participation in the life of a community (the paradigm of relationship) whereas the latter highlighted the person's capacity to innovate production and improve the quality of social life (the paradigm of efficiency at the service of humankind).

Finally, the second generation of northern economists believed that the growth of human capital constitutes the presupposition of economic growth and social stability (Gioja, 1815; Scialoja, 1840). They understood (Romagnosi, 1832) that the state must directly promote initiatives for the *civilisation* of society (education, training, culture) while it must guarantee the good working of other economic markets whilst remaining in a supplementary position (Luzzatti, 1874). In the second northern generation of economists economics is intended as the *science of human work* and not of the wealth of a nation, although the former does not exclude the latter. Cattaneo strongly stressed (1861) the impact of *metaphysical ideals* on the economic performance of every person and whole community while Lampertico (1874, 1875, and 1876) sustained the necessity of an *interclassist approach* to economic issues in the awareness that society is an organic reality. Some northern authors of the second generation were even directly engaged in politics and thus underlined aspects of human capital related to the development of new born Italy (Rossi, 1891; Luzzatti, 1892).

In conclusion, we can state that the approach of Italian classical economists is very different to that of classical English (Blaug, 1975), French (Bellet, 2009) and Marxist (Wolfson, 1996) schools, the marginalist theory of human capital of Chicago school (Sandona Lu., 2010), and the alternative approaches to human capital. In fact, Italian authors elaborated theories on human capital grounded on a relational anthropology. They actually emphasized the fact that the human being is a *person* and not an individual because, besides being endowed with theoretical knowledge and working capabilities, he feels emotions, develops interpersonal relationships, cultivates moral values, and has religious experiences. In other words, the approach of the Italian

classical school promotes an organic conception of society and highlights the primacy of morality and knowledge in a dynamic and interactive vision of human capital. In fact, a human person is capable of practicing *civic virtues* in the attempt of attaining *public happiness*.

Chapter 2.

Human Capital in the English Classical School:

The Introduction of the “Homo Economicus” Paradigm

1. Introduction

English classical theorisations of human capital began in the late 18th century with Adam Smith and faded in the late 19th century when marginalism took root. The livelihood of a majority of British citizens depended on agriculture; however, beginning in the 19th century there was increasing industrial activity occurring in larger metropolitan areas. “*Since about 1820 British trade has almost uninterruptedly improved*” (Briggs, 1926, p. 408) as financial resources for building new ways of communication and investing in research studies became increasingly available. New technology originating from the first industrial revolution increased factories’ productivity by maintaining a fixed cost of manpower. More efficient work processes increased entrepreneurs’ profits (Hirschman, 1977) as well, which in the capitalistic spirit were used to enlarge the market. This caused a reduction in prices of goods and the growth of workers’ wages (Dauton, 1995).

Umberto Meoli⁴⁹ stated that “*some common social origins and some intellectual similarities*”⁵⁰ existed among various English classical economists (1978, p. 220). This analogy was scientifically translated into an elaboration of hypothetic models based on the *free competition* principle. The theories of the various economists were very distinct, but all were deeply influenced by Adam Smith’s principles (Groenewegen, Vaggi, 2002, p. 127). Indeed, Schumpeter argued (1954, p. 194) that all the English classical scholars were indebted to Smith. Thus, we can analyse the findings of the English classical school by referring mainly to its founder.

⁴⁹ Umberto Meoli (1920-2002)

⁵⁰ The Italian original quotation is “*alcune origini sociali comuni e in talune affinità intellettuali.*”

However, Salim Rashid (1988) stated that Smith's ideas were not new and cannot be regarded as his intellectual property. The principles employed by Smith were previously known, but they were rediscovered during the positive economic trend of the years during and just after Smith's life (Ashton, Hudson, 1998). During the late 18th century, economics grew more independent of moral philosophy and became a separate scientific field. In the English context, this influenced the academic world and led to an abstract and hypothetic configuration of economic science. In fact, Condorcet,⁵¹ Henry Saint-Simon,⁵² and Sismonde de Sismondi⁵³ unsuccessfully criticised the new approach (Grossman, 1943) because it ignored the connection between facts and values. However, the English classical authors insisted on the distinction and introduced a new specific methodology exclusively focused on maximising the wealth of the nation.

2. Human Capital in Smith

Adam Smith, the founder of modern economics, was of Scottish origin and was educated as a pupil of Francis Hutcheson⁵⁴ at Glasgow University. Smith went on to become a professor of moral philosophy (Evensky, 2005) at Glasgow University, writing the *Theory of Moral Sentiments* (1759), a treatise about morality based on a host of psychological motives, during this time. His analysis primarily revolved around the idea that people need *approbation* or approval during various times in life. He stated:

What are the advantages which we propose by that great purpose of human life which we call bettering our condition? To be observed, to be attended to, to be taken notice of with

⁵¹ Jean-Antoine-Nicolas de Caritat Condorcet (1743-1794)

⁵² Henry Saint-Simon (1760-1825)

⁵³ Sismonde de Sismondi (1773-1842)

⁵⁴ Francis Hutcheson (1694-1796)

sympathy, complacency, and approbation, are all the advantages which we can propose to derive from it. It is the vanity, not the ease or the pleasure, which interest us ... Vanity is always founded upon the belief of our being the object of attention and approbation. The rich man glories in his riches, because he feels that they naturally draw upon him the attention of the world. (Smith, 1759, p. 50-51)

Smith's approach was unique because he assumed the view of an impartial spectator (Heilbroner, 1982, p. 428). Approbation and the cynical and cold observation of reality constitute the two principal elements for understanding, as a whole, Smith's incomplete trilogy (Paganelli, 2008), specifically his 1759 work, and his most famous, *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), and an unwritten third volume whose flavour may be found in the *Lecture on Jurisprudence* (1762-1763). The topic of approbation was clearly discussed by Maria Pia Paganelli (2008), who defines it as something "*gained from having material possessions and what others see as property of behaviour*" (2009, p. 60). For Smith, the attainment of individual approbation unintentionally and indirectly produces the general interest of society (Samuels, 2007). However, Smith advised that sometimes people's actions destabilise the well-being of an entire society when they pursue their own individual aims (Rosenberger, 1990). In other words, it is possible that individuals' aims can generate a society that is worse off because people are fallible, fail often, and sometimes are motivated by perverse incentives. According to Smith,

the candidates for fortune too frequently abandon the paths of virtue ... They often endeavour, therefore, not only by fraud and falsehood, the ordinary and vulgar arts of intrigue and cabal;

but sometimes by the perpetration of the most enormous crimes, by murder and by assassination, by rebellion and by civil war, to supplant and destroy those who oppose or stand in the way of their greatness. (1759, p. 64-65)

Therefore, Smith wrote that approbation for individual wealth and social status had to be associated with *faultless moral conduct* (1759, p. 61-66). Otherwise, the attainment of admiration could cause vicious and bad behaviours. Smith proposed his specific capitalistic theory because he knew there was no perfect economic system independent of moral judgment. Starting with the conception of economics as the science of increasing the wealth and power of nations, he emphasised the need for liberating economic forces through a free market and free society. For Smith, the only restraint that needed to be imposed on the market was the application of justice (Pack, 1991). As Robert Nozick⁵⁵ (1974) suggested, the state has to assume a minimal role and has thus only to realise measures for eliminating open market barriers, price trusts formulated by oligopolistic groups, and every other factor that reduces the consumer's advantage in free trade. The liberal interaction of individuals would not create chaos but, via the "invisible hand" would generate an *orderly pattern* if people act logically in competition. In Smith's opinion, every individual is identical to the other because everyone responds in an identical way to the same stimuli (Evensky, 1993). At this point in the history of economic thought, the paradigm of *homo economicus* was born; the notion being that human beings are perfectly standardised agents. In fact, for Smith, people are all the same, and they change only in relation to the education they receive. Smith explained this very well:

⁵⁵ Robert Nozick (1938-2002)

The difference between a philosopher and a common street porter, for example, seems to arise not so much from nature, as from habit, custom, and education. When they came into the world, and for the first six or eight years of their existence, they were, perhaps, very much alike, and neither their parents nor playfellows could perceive any remarkable difference. About that age, or soon after, they come to be employed in very different occupations. The difference of talents comes then to be taken notice of, and widens by degrees, till at last the vanity of philosopher is willing to acknowledge scarce a resemblance. But without the disposition to truck, barter, and exchange, every man must have procured to himself every necessary and convenience of life which he wanted. All must have the same duties to perform, and the same work to do, and there could have been no such difference of employment as could alone give occasion to any great difference of talents. (Smith, 1776, p. 7)

The Smithian capitalism theory was thus based on a *deterministic* conception of human capital. Smith took into account workers as simple factors of production, equal to machines or raw materials, as well as considering entrepreneurs equal to robots that start up the capitalistic mechanism. In fact, in this theory business men are considered slaves of the approbation desire derived from the possession of more wealth (Paganelli, 2006). According to Smith,

the chief enjoyment of riches consists in the parade of riches, which in their eyes is never as complete as when they appear to possess those decisive marks of opulence which nobody can possess but themselves. (1776, p. 73)

Finally, Smith understood that improving the efficiency of the production process was necessary in order to maximise wealth, but recognised that the growth of productivity implied the valorisation of human capital by introducing the division of labour.

2.1 Smith's Human Capital and the Division of Labour

Smith surpassed the economic mercantilist principles based on the state achievement of positive balance of payments, stating that,

the greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is any where directed, or applied, seem to have been the effects of the division of labour. (1776, p. 2)

Thus, the same work done by many men in less developed states could be accomplished by only one man in industrial countries. For example, production in a pin factory had to be subdivided into a series of *elementary operations* (Smith, 1776, p. 3). The worker thus increased his productivity and expertise in that precise step of the labour cycle by continuously performing the same action. Workers did not have to move from place to place to carry out a different task. Moreover, they could introduce some *small innovations* that allowed production time to be minimised. Nevertheless, there were some negative aspects of the division of labour, such as worker alienation and the suppression of intellectual and physical capabilities (Rashid, 1986). According to Smith,

the man whose whole life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out

expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him, not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life ... The uniformity of his stationary life naturally corrupts the courage of his mind, and makes him regard with abhorrence the irregular, uncertain, and adventurous life of a soldier. It corrupts even the activity of his body, and renders him incapable of exerting his strength with vigour and perseverance, in any other employment that to which he has been bred. (1776, p. 327)

This mechanical repetition of work meant that even children could be employed in the production process, especially if education was neglected or limited for them (Manacorda, 1997). In addition, Edwin West⁵⁶ (1996) noted that, at the time of Smith, many workers missed the spirit of defending national interests because they were too focused on their tasks. For Smith, the *moral* and *cultural crisis* of English society occurred because of the change in the kind of work people were engaged in, that is from agricultural work in rural areas to industrial work in cities (Perri, Pesciarelli, 1996). In fact, the location of production moved from artisans' shops to mercantile environments to factories. When people lived in an agricultural world, they maintained a desire for creativeness and inventiveness, while in an industrial one they were forced to suppress their intellectual abilities. In this historical context, Stefano Spalletti observes that Smith wanted “*to prevent the negative effects of labour specialization*”⁵⁷ through education (2009, p. 38).

⁵⁶ Edwin George West (1921-2001)

⁵⁷ The Italian original quotation is: “*a prevenire gli effetti negativi della specializzazione del lavoro.*”

2.2 Smith's Human Capital and Social Control

Another aspect of Smith's human capital theory is related to the possibility of reducing social conflicts. Smith argued that education promoted *good morals* by teaching people that the ordered regulation of human activities is necessary to grow national wealth. Indeed, he believed that education could promote the awareness of every individual's goals, could contribute to the development of the industrial sector and help to prevent crime. Mark Blaug called this part of Smith's thought regarding human capital, the "*theory of social control*" (1975, p. 572). Rhead Bowman (1990), however, read these Smithian arguments as an attempt to create a peaceful context in order to support individual private initiatives in economic matters, and West viewed (1964a and 1964b) them as practical indications for promoting what Jeremy Bentham⁵⁸ (1789) described as "social utility." Smith affirmed his view on education, as follows:

The state, however, derives no inconsiderable advantage from their instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. Instructed and intelligent people are always more decent and orderly than an ignorant and stupid one. They feel themselves, each individually more respectable, and more likely to obtain the respect of their lawful superiors, and they are therefore more disposed to respect those superiors. They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government. In free countries, where the safety of government depends very much upon the favourable judgment which the people may form of its conduct, it must surely be of the highest importance that they

should not be disposed to judge rashly capriciously concerning it. (Smith, 1776, p. 329)

For this reason, Smith felt it was essential that the state promote and coordinate education for the populace.⁵⁹ The active role of the state was not to work against the principle of free competition, but to work to generate a real *demand* for education. Parents did not know the value of study because they did not see concrete proof of its economic expediency, like, for instance, a higher wage for more educated workers.⁶⁰ Smith argued that the public should support, encourage and “*even impose upon almost ... the necessity of acquiring those most essential parts of education*” (Smith, 1776, p. 328). Nevertheless, Blaug observes (1975, p. 592) that Smith never mentioned that elementary education had to be obligatory and free for all children. We can thus understand Smith’s thesis in the following way: firstly, the state had to publicise the features and advantages of the “product education” to the present consumers for creating a demand of this service in the future (Hollander, 1968). Secondly, the state could have eliminated its incentives. However, Smith recognized that the passage from the first to the last step would not have been so fast, but he thought it important to minimise the time necessary by promoting competition between different schools in order to help convince people of the importance of education. Lionel Robbins⁶¹ commented that in the Smithian vision, the state “*should provide subsidized, but not quite free, elementary education*” (1952, p. 90). Smith thought that the state should create new public schools on a universal scale, but it also needed to support currently existing institutes of religious education (O’Donnel, 1985, p. 70-71). The experience of Christian schools, charity schools, Sunday schools and others might have been helpful in defining the new public realities of education (Fay, 1956).

⁵⁸ Jeremy Bentham (1748-1832)

⁵⁹ Smith disliked the education system of England forecasted by 1665 legislation because it was financed by the donations of rich people. He preferred the older Scottish system still in force by 1696. In Scotland there was an institutional connection between education and the parishes (Houston, 1954, p. 172).

⁶⁰ The difference in wages between educated and uneducated workers was especially evident in factories because the sons of employees could not do a liberal profession for the existence of a long and unpaid stage at a master office.

On the other hand, for Smith there were some controversial aspects of providing universal education. If it were true that men increased their capacity to make informed judgments, they would become more aware, and thus better able to defend their interests. By augmenting their wage claims, workers could provoke a reduction of competitiveness of factories. Consequently, the upper classes risked a cut of their privileges, which were in part due to the ignorance of the general population. Gregory Tucker states that,

landowners obtained their income without exertion or forethought; their social position predisposed them against speculation on economic matters and they were generally incapable of comprehending the true and ultimate causes of legislation. The labourer was even less fitted to judge the merits of economic policy for he lacked access to the facts and he had little education; his influence on the decisions of government was usually negligible. (1960, p. 70)

In other words, capitalists did not favour universal education because it would diminish their profits in the long term (Freeman, 1969, p. 175-176). Therefore, Smith was thwarted in the political arena.

2.3 Smith's Human Capital and Workers' Training

Contrary to his ideas about government involvement in universal education, Smith believed the state should have no role in worker training. In fact, he argued that training was the duty of employers. Smith also criticised the length of training involved in becoming a liberal professional worker (lawyer, engineer, etc.) and artisan. At that time, workers were provided with the benefit of an apprenticeship, a contract during which one learns a trade or profession by serving a master for a certain period of time. However, apprenticeships were often transformed into indentured servitude, with poor working conditions and measly compensation. In

⁶¹ Lionel Robbins (1898-1984)

these conditions, only the sons who were well-maintained by parents could become professionals (lawyer, engineer, etc.) and artisans. Further, only wealthy parents could maintain sons while they pursued professional training. Smith wrote that,

during the continuance of the apprenticeship, the whole labour of the apprentice belongs to his master. In the mean time he must, in many cases, be maintained by his parents or relations, and in almost all cases must be clothed by them. Some money too is commonly given to the master for teaching him his trade.
(Smith, 1776, p. 42)

Therefore, eliminating the practice of apprenticeship would not reduce the quality of service if some kind of qualification exams were introduced (Smith, 1776, p. 844). The two Smithian considerations were not paradoxical. Smith thought that future professionals and artisans had to be prepared and capable, but for this reason they should not be exhausted by protracted, harsh apprenticeships. In fact, the present system continuously nourished an inequitable distribution of income. According to Smith,

education in the ingenious arts and in the liberal professions is still more tedious and expensive. The pecuniary recompense, therefore, of painters and sculptors, of lawyers and physicians, ought to be much more liberal: and it is so accordingly. The profits of stock seem to be very little affected by the easiness or difficulty of learning the trade in which it is employed. (Smith, 1776, p. 42-43)

2.4 Smith's Human Capital and the University System

Smith also wrote about the function of universities. He was a professor at university and so he was very familiar with the academic world (Fauci, 1996, p. 14-21). The starting point of Smithian analysis was that, at that time, there were very few

students enrolled in academic institutions. In fact, wealthy parents preferred to send their sons abroad to travel.⁶² They judged universities negatively because these institutions emphasised teachers' privileges rather than students' needs. Smith argued that the aim of the system was to “*maintain the authority of the master*” (1776, p. 320), who went unchecked in the fulfilment of his duty. In Blaug's opinion (1968, p. 96), this academic setting rendered it impossible to ascribe good or bad results to a specific teacher. Therefore, Smith thought it reasonable to introduce a system of rewards and punishments into the university structure in order to improve its functioning (O'Donnel, 1985, p. 72). Smith explained this point, stating that:

The rivalry of competitors, who are all endeavouring to jostle one another out of employment, obliges every man to endeavour to execute his work with a certain degree of exactness. The greatness of the objects which are to be acquired by success in some particular professions may, no doubt, sometimes animate the exertion of a few men of extraordinary spirit and ambition.
(Smith, 1776, p. 318-319)

The state did not have to be the only one supplier of education, but it had to promote *pluralism* by inviting the participation of private subjects in the education market and by founding new institutes. This political step would impact the quality of service because universities benefited from the desire to improve themselves through competition. In fact, Smith argued that the following natural law existed everywhere:

⁶² “*In England, it becomes every day more and more the custom to send young people to travel in foreign countries immediately upon their leaving school, and without sending them to any university.*” (Smith, 1776, p. 324)

Rivalship and emulation render excellency, even in mean professions, an object of ambition, and frequently occasion the very greatest exertions. (1776, p. 319)

His thought was to establish *meritocratic* measures in the university system. Smith thus proposed awarding prizes to better students (Smith, 1776, p. 843). This would work as a sign of interest in the educational performances of the young by the entire adult community. Smith also recognised that the creation of a teachers' syndicate would cause an indifferent and apathetic work environment where a reciprocal indulgence among colleagues would be cultivated. Smith stated:

If the authority to which he is subject resides in the body corporate, the college, or university, of which he himself is a member, and in which the greater part of the other members are, like himself, persons who either are, or ought to be teachers; they are likely to make a common cause, to be all very indulgent to one another, and every man to consent that his neighbour may neglect his duty, provided he himself is allowed to neglect his own. In the university of Oxford, the greater part of the public professors have, for these many years, given up altogether even the pretence of teaching. (Smith, 1776, p. 319)

In order to remedy this situation, teachers' motivations had to change. Smith defined the problem in these terms: professors' wages remained stagnant no matter their output, which did not encourage good performances. Therefore, Smith suggested that professors' wages be paid partly by the state and partly by parents. The part paid by the state would be fixed and the part paid by parents would be variable. The *variable share* would force professors to improve the regularity and quality of lessons. Therefore, this mechanism would encourage teachers to compete with each other (Smith, 1776, p. 835-838).

In conclusion, we can state that the university system plays a fundamental role in Smith's thought concerning human capital of people. Smith suggested some practical proposals based on rivalry, competition, and meritocracy for improving the function of universities.

3. Human Capital in Ricardo

The concept of human capital is virtually absent in the work of the late 18th century economist David Ricardo.⁶³ In fact, Washington Miller comments:

The Economics of education is one subject in English classical economics which can be discussed without reference to Ricardo.
(1966, p. 294)

This is surprising because Ricardo is well known for having analysed many aspects of economics with a unique and systematic ingeniousness. He proposed a new labour theory of value, in which he explained the inconvenience of protectionism, the decreasing rates of physical capital in the agricultural sphere, and the law of equivalence concerning the inefficacy of an indebted state to attempt to stimulate demand (Hollander, 1979).

Ricardo indirectly discussed human capabilities only in his theory of *comparative advantage* (Ricardo, 1817, p. 108-27). His concept of human capital is reminiscent of Smith's version in the sense that he argued that it is important for a country to encourage *specialised* manpower in its strongest sector, although he felt that a trading partner produced better goods (Case, Fair, 1999, p. 812-18). However, in his *Principles of Political Economy and Taxes*, Ricardo only once

⁶³ David Ricardo (1772-1823)

quoted the word “education” in referring to plans to solve the problem of famine. He stated:

In those countries where there is abundance of fertile land, but where from the ignorance, indolence, and barbarism of the inhabitants, they are exposed to all the evils of wants and famine, and where it has been said that population presses against the means of subsistence, a very different remedy should be applied for that which is necessary in long settled countries, where, from the diminishing rate of the supply of raw produce, all the evils of a crowded population are experienced. In the one case, the evil proceeds from bad government, from the insecurity of property, and from a want of education in all ranks of the people. To be made happier they require only to be better governed and instructed, as the augmentation of capital, beyond the augmentation of people, would be the inevitable result.
(1817, p. 76)

We understand, therefore, that Ricardo argued that the spread of elementary knowledge was useful to increase well-being in those agricultural areas where the law of diminishing rates was not applied because the use of land was not optimal. Human capital was only considered as an instrument for purposes of *economic distribution* and not as an objective *per se*, as Ricardo was not interested in the cultural growth of persons.

4. Human Capital in Malthus

The late 18th century British scholar Thomas Robert Malthus⁶⁴ believed it was imperative to teach people about birth control in order to avoid overpopulation and its potentially catastrophic consequences. In his treatise, *An Essay on the Principle of Population* (1798), he explained that population increases in a geometrical ratio, while food supplies increase in an arithmetical one.

Malthus added that the increase in population implied an augment of labour supply. This bigger supply would eventually diminish the amount of wages, resulting in an insufficient standard of living. As a consequence, Malthus argued that England had to impose some measures for keeping the population within resource limits. He believed two types of checks would accomplish this: *positive* checks that raise the death rate and *preventative* ones that lower the birth rate. The positive checks include hunger, disease and war; the preventative checks include abortion, birth control, postponement of marriage and celibacy. Therefore, Malthus conceived of human capital as a solution to the *population problem*. West notes that Malthus also conceived of human capital as a social means that could be employed in the “*reduction of crime*” (1965, p. 118) and the spread of ethical behaviour in the workplace. Malthus believed the main task of teachers was to place

considerable stress on the frequent explanation of the real state of the lower classes of society as affected by the principal of population, and their consequence dependence on themselves for the chief part of their happiness or misery. (Malthus, 1798, p. 437)

⁶⁴ Robert Malthus (1766-1834)

Otherwise, in the future people would face severe hunger and disease. However, Malthus did not take into account the potentialities of human capital of persons, such as the discovery of new technological means capable of increasing food production, as happened during the Industrial Revolution.

5. Human Capital in McCulloch

Scottish economist John Ramsay McCulloch⁶⁵ became the leader of the Ricardian school after the death of David Ricardo. McCulloch elaborated upon the theory of value based on *accumulation* of labour, studied the foundational sources of profit and interest and focused on the spread of education among the poor. This last interest was deeply influenced by Smith's reflections regarding human capital. In fact, McCulloch re-discovered the positive aspects of the division of labour and emphasised the social duty of providing all people with elementary education (O'Brien, 1970). On the other hand, McCulloch criticised Smith's belief that English society was experiencing a moral and cultural crisis compared to the previous agricultural-based society. According to McCulloch:

Nothing can be marvellously incorrect than these representations. Instead of its being true that the workmen employed in manufacturing establishments are less intelligent and acute than those employed in agriculture, the fact is distinctly and completely the reverse. (1864⁵, p. 132)

In his opinion, physically working together in factories was useful for the human growth of people. In the context of a workplace, the workers could increase the quality of relations by being asked their suggestions and given daily choices

regarding what they would do and by helping each other when problems occurred. This did not happen in the agricultural world. In fact, Joseph Spengler⁶⁶ appreciated McCulloch's innovative analysis of change from an agricultural to an industrial society, especially because it was elaborated "*in a world less ridden with externalities than today's*" (1977, p. 36). Finally, McCulloch argued that education was useful for social control. Thus, the state had to take a *paternalistic* role in the market. As parents of that time did not recognise the value of education, it was necessary to introduce a national system of education for the entire population. McCulloch wrote:

Poverty is, probably, the principal source of misery and crime; and ignorance, or a want of the knowledge of the laws circumstances that determine the condition of the great bulk of mankind in society, is, indirectly and at least, an efficient source of poverty, and, therefore, of crime. It is now, indeed, very generally acknowledged, that the providing of elementary instruction for all classes of its subjects is one of the most pressing duties of government. (McCulloch, 1864⁵, p. 396)

In Andy Green's opinion (1990), this proposal for universal elementary education aroused the hostility of conservative and progressive parties because it endangered their interests. Politicians rejected McCulloch's idea that human capital is a *property of the individual* because it is a stock of immaterial resources endowed by it. Otherwise, the entrepreneurs had to increase the workers' wages in direct relation to the growth of human capital. Even if he did not advance a mathematical

⁶⁵ John Ramsay McCulloch (1789-1864)

⁶⁶ Joseph Spengler (1902-1991)

formula like Edwin Chadwick⁶⁷ (1862), McCulloch nevertheless emphasised the *money paradigm* in his analysis by stating:

The pecuniary wages or earnings of scientific and literary men are, with a few rare exceptions, very inconsiderable. This arises from a variety of causes; but principally, perhaps, from the indestructibility, if I may so term it, and rapid circulation of their works and inventions. The cloth of the manufacturer and the corn of the agriculturist are speedily consumed, and there is a continued demand for fresh supplies of the same articles. Such, however, is not the case with new inventions, new theories, or new literary works. (McCulloch, 1864, p. 310)

6. Human Capital in Senior

In order to correctly understand Nassau William Senior's⁶⁸ reflections, it is necessary to know his *political background* (Bowley, 1967). Senior was elected to fill the presidency of Oxford University,⁶⁹ was a member of the Poor Law Inquiry Commission of 1832 and was co-author of the Report on Popular Education of 1857-1861. His ideas were significantly influenced by his participation in the formation of the laws concerning schools. At that time, the system of elementary education lagged behind that of other nations (Stephens, 1998). In fact, compulsory education was introduced by the British government only with the Education Act in 1870, while education became compulsory in Prussia in 1773,⁷⁰ in France in

⁶⁷ Edwin Chadwick (1800-1890). He esteemed that the educated worker is from 20% to 25% more productive than the uneducated one. That was only an estimate, but it introduced a quantitative method for measuring human capital.

⁶⁸ Nassau William Senior (1790-1864)

⁶⁹ He guided Oxford University from 1825 to 1830.

⁷⁰ This statement was reinforced by the general civil code of 1794, which introduced the "Volksschule," a free public system of education financed by local taxation.

1882,⁷¹ and in Italy in 1859.⁷² Senior's life disproves Blaug's exhortation to "*pay attention to dates*" for comprehending that the classical economists "*gradually adjust their ideas*" (1975, p. 568) to the decisions of government instead of influencing them (Smith and McCulloch tried to influence politicians but without success).

Senior did not directly discuss human capital in his work, *An Outline of the Science of Political Economy* (1836). Instead, he proposed a theory of deductive economics based on the paradigm of human selfishness. He argued that the premises of economic discourse were not based on conventional assumptions, but on real facts that made it possible to identify and attain concrete social goals (1836, p. 129-130). Of course, Senior pointed out that economics is a science aimed at wealth maximisation and cannot be based on ethical and moral values (1836, p. 139). Nevertheless, Senior formulated an innovative value theory about the sum of commodities, the cost of production and the cost of "abstinence" (Gootzeit, 1992). This last concept was a new *human element* in economic analysis and was defined as "*the conduct of him who abstained*" from the unproductive consumption of goods or the conduct of him who "*employed labour to produce distant results*" (Senior, 1836, p. 206). Thus, Senior entirely agreed with Smith, who he quoted in his work (1836, p. 214). However, Senior pointed out that:

We think it shows the property of rather terming the surplus remuneration of skilled over common labour profit than wages. It is an advantage derived by the skilled labourer in consequence partly of his own previous conduct, and partly of that of his parents or friends; of the labour and of the expense which they respectively contributed to his education. It is a

⁷¹ The Napoleonic education structure remained alive during the Restoration and was further developed with the Law Act, which stated the compulsory, free and universal nature of education.

⁷² The Casati Law of 1859, published in the Kingdom of Savoy, was extended to the entire peninsula when Italy was united in 1861.

profit on a capital, though on that sort of capital which cannot be made available without the labour of its possessor. (1833, p. 214)

In 1852, Senior empirically highlighted the cause-and-effect relationship between education and economic growth. The positive correlation between the two had previously been discussed, but was not again confirmed by analysing statistical data. Senior demonstrated that the spread of elementary education resulted in the “*promotion of security*” (1852, p. 195). He identified a connection between growth of human capital and of social capital and between increase of social capital and of economic trends. Consequently, he argued that the state had a paternalistic responsibility because “*education was as much necessary to a child as food was*” (1861, p. 1). In cases where families were unable to afford the cost of education, the public had to help them with fellowships and scholarships, otherwise,

the Report may then give outline of the probable results of the withdrawal of Government interference: the desertion of the training colleges, the cessation of the supply of trained masters and mistresses, the closing of a large portion of the existing schools, the absence of view ones, and the general deterioration, moral and intellectual, of the labouring population. (1861, p. 6)

Finally, Senior proposed an increase in workers’ wages so they could directly pay for education, thus allowing them to assume individual responsibility (Spalletti, 2007, p. 19-20). However, considering his support of free competition, it is difficult to understand Senior’s denigration of religious schools and his desire to exclude them from the education market (Senior, 1861, p. 11).

7. Human Capital in J.S. Mill

James Stuart Mill⁷³ was one of the late 18th century most important economists because he was a brilliant philosopher, a pragmatic politician⁷⁴ and a good business manager.⁷⁵ His father, the noted economist James Mill,⁷⁶ wanted his son to study Latin and Greek and read the best authors of the classical tradition (Hollander, 1985). Ricardo and Bentham were contemporaries of Mill Sr. and they often discussed economic issues at the Mills' house in the presence of J.S. Mill. In addition, J.S. Mill attended some of Jean Baptist Say's⁷⁷ lessons and personally knew Henry Saint-Simon.⁷⁸ He thus grew up surrounded by the best economic minds. This was one reason for the quality of his writings.

J.S. Mill's first important book, *The Principles of Political Economy*, was published in 1848. In this work, J.S. Mill discussed diverse economic ideas developed by preceding economists, such as the promotion of a free market society, but he incorporated ideas about other topics as well. As Giacomo Becattini (1983, p. 10) points out, J.S. Mill did not believe political economics was an independent science, but that it was a *branch* of the social sciences, as the Scholasticism and Italian classical authors taught. In this framework we must examine Mill's thoughts concerning human capital. In fact, J.S. Mill believed in the necessity of determining *social justice* in the regulation of the liberal professions and the arts. The concept of an unpaid apprenticeship constituted, in his view, a true and real violence to the principle of equal opportunity. Only those born to wealthy families could afford to work for years without receiving a wage. According to J.S. Mill,

⁷³ James Stuart Mill (1806-1873)

⁷⁴ He was a member of English Parliament and participated in Liberal Party activities.

⁷⁵ He preferred to work for the East India Company rather than study at Oxford or Cambridge University.

⁷⁶ James Mill (1773-1836)

⁷⁷ Jean-Baptiste Say (1767-1832)

⁷⁸ Henry Saint-Simon (1770-1825)

the inequality of remuneration between the skilled and the unskilled (that) is, without doubt, very much greater than is justifiable. (Mill, 1848, vol. I, p. 479)

Consequently, Mill rejected the idea that there should be no state involvement in things like education. The general populace did not fully recognise the advantages of education, which made entrepreneurs unwilling to risk financial resources on promoting it. Mill stated it was necessary that the state provide such a basic right in order to have a cultured society. He thus defined education, as well as roads, bridges, national defence and the like, as a *public good* (Spalletti, 2008, p. 193). In fact, the phenomenon of asymmetric information occurred in this particular social context, as the general public had little awareness of the relevance of education. J.S. Mill stated:

But there are other things, of the worth of which the demand of the market is by no means a test; things of which the utility does not consist in ministering some inclinations, nor in serving the daily uses of life and the want of which is least felt where the need is greatest. This is particularly true of those things which are chiefly useful as tending to raise the character of human being. The uncultivated cannot be competent judges of cultivation. Those who most need to make wiser and better, usually desire it least, and if they desire it, would be incapable of finding the way to it by their own lights. (J.S. Mill, 1848, vol. II, p. 573)

In addition, Mill observed that the individual interest of the consumer could not alone guarantee the goodness of the community. Mario Pomini (2009) comments that the Millian plan implied public financing for creating publicly owned institutions that children could attend without paying a great deal of money. In fact, upon reading some reports about education, J.S. Mill concluded that the duty of a developed society was to make education “*accessible to all the children of the poor*” (1848, Vol. II, p. 579). In his mind, compulsory elementary education created a more respectful and peaceful society (Garforth, 1980). It was thus impossible to forget the importance of *classical studies*. In fact, in his *Dissertations and Discussions* (1859a), J.S. Mill pointed out that the study of matters that did not have immediate application in the labour market, such as learning about classical culture or studying history and philosophy promote a sense of belonging to a community and encourage reflection about the meaning of life. He did not deny the importance of mathematical and mechanical capabilities, but believed that in a progressive society,

the study of modern languages, if they give a mastery over that ancient language which is the foundation of most of them, and the possession of which makes to easier to learn four or five of the continental language that it is to learn one of them without it. (1859a, p. 345-346)

J.S. Mill argued it was not sufficient to only give children “*empirical knowledge which the world demands,*” even if such knowledge constituted “*the stock in trade of money-getting life*” (1859a, p. 219). He believed it was critical to emphasise the beauty of human relations between the master and the disciples, which implies a reciprocal attempt to understand the ultimate meaning of life through daily experience (1859a, p. 334-35). Scott R. Sweetland notes (1996, p. 343-44) there was a *utilitarian* promotion of having people cultivate their innate competencies

and skills in Mill's work. Actually, education was not intended as an integral upbringing which affects all aspects of life such as rest, leisure and affections.

7.1 J.S. Mill's Human Capital in *On Liberty*

On the other hand, J.S. Mill presented a different and more interesting concept of human capital in his work *On Liberty* (1859b). In this treatise, he introduced the *harm principle*: individuals can do anything they like as long as it does not harm others; this includes doing nothing at all. In economic and political terms, this concept allowed for a list of permitted and prohibited actions regarding the improvement of social capital. However, the anthropological presupposition was not grounded on the value of human dignity (J.S. Mill talked about individuals, not persons) but was based on the principle of utility. For instance, J.S. Mill agreed with the importance of free speech (1859b, p. 9-31) for avoiding social rebellions, but not for recognising an innate human right; he was also in favour of developing the role of women in society (1859b, p. 40-54) and eliminating slavery (1859b, p. 20-28), but for utilitarian rather than moral reasons. On concerning human capital, J.S. Mill wrote:

Were the duty of enforcing universal education once admitted, there would be an end to the difficulties about what the state should teach, which now convert the subject into a mere battle-field for sects and parties, causing the time and labour which should have spent in educating, to be wasted in quarrelling about education. If the government would make up its minds to "require" for every child a good education, it might save itself the trouble of providing one. It might leave to parents to obtain the education where and how they pleased, and content itself with helping to pay the school fees of the poorer class of children, and defraying the entire school expenses of those who have no one else to pay for them. (J.S. Mill, 1859b, p. 62)

However, J.S. Mill's defence of *religious liberty* enhanced his concept of human capital. He acknowledged that state participation in education did not necessarily mean state management of education (Blaug, 1967). Rather, the state had to *help* families with education costs inside a free and competitive market of education and to *check* the conformity of teachings to standard programs stabilised by law (Friedman, 1962).

7.2 J.S. Mill's Human Capital in Utilitarianism

In 1863, J.S. Mill published the book *Utilitarianism*, in which he differentiated (1863, p. 1-6) his concept of social utility from that of Bentham's. The Bentham's concept of social utility derives from the difference between the sum of pleasures and that of pains: the former has to be maximized and the latter has to be minimized. In a macro economic perspective, social utility corresponds with the greatest happiness derived from maximising the pleasure for the greatest number of people. By contrast, in his definition of social utility, J.S. Mill argued (1863, p. 8-38) that we must take account of the major relevance of *intellectual* and *moral pleasures* and confront physical ones. Moreover, he set forth that individual utility was not measurable in terms of degrees of pleasure and pain, confusing happiness with contentment. J.S. Mill believed that many sensations and feelings exist that cannot be adequately expressed in mathematical terms. As a consequence, he was in favour of a more "practical" approach to economics based on social justice (1863, p. 62-96). It is necessary to remember that some people never experience extreme high or low pleasures, and thus are not in a position to fully understand these sentiments. At that time especially, many people were unable to recognise the value of education and the *integral upbringing* of people (Tu, 1969). Mill insisted that a good *moral profile* of human capital constituted the secret for economic development. Good morals resulted in a more efficient modality of work and a stronger willingness to collaborate with others. J.S. Mill explained his thinking as follows:

If the belief in transcendental origin of moral obligation gives any additional efficacy to the internal sanction, it appears to me that the utilitarian principle has already the benefit of it. On the other hand, if, as in my own belief, the moral feelings are not innate but acquired, they are not for that reason less natural. It is natural to man to speak, to reason, to build cities, to cultivate the ground, though these are acquired faculties. The moral feelings are not, indeed, a part of our nature, in the sense of being in any perceptible degree present in all of us [...] Like the others acquired capacities above referred to, the moral faculty, if not a part of our nature, is a natural outgrowth from it; capable, like them, in a certain more degree, of springing out spontaneously; and susceptible of being brought by cultivation to a high degree of development. (Mill, 1863, p. 45)

Therefore, Mill designed an interesting construct of human capital that considered the moral and intellectual capacities of men beyond their physical ones. However, his approach was based on a new utilitarian paradigm.

8. Conclusions

Upon reviewing the arguments put forth by English classical economists regarding human capital, we can immediately draw a significant difference between this school of thought and the Italian classical scholars. The former intended human capital *only* as education and training, while the later introduced the wider concept of “educazione.” J.S. Mill seems the only exception to this rule, as he emphasized (1859a) the importance of learning classical philosophy and modern language, as well as stressing (1863) the moral profile of human capital. He contrasted (1848) the colleagues’ prevalent

configuration of economics as a self-sufficient and independent science by proposing a vision of economics in a view of *unity* with philosophy, politics, and sociology.

However, all English classical thinkers, J.S. Mill included, adopted the paradigm of “homo economicus” and the criterion of *utility* in an individual or in a social horizon (Smith, 1759). They generally were in favour of a free market society grounded on the principle of competition (Smith, 1776; Senior, 1836). Nevertheless, they agreed with the necessity of *state intervention* in the education market because most parents did not recognise the importance of study for their children, nor did most have sufficient money to finance their education (Smith, 1776; J.S. Mill, 1859b; Senior, 1861). They even pointed out the expediency of state intervention in the education market for guaranteeing the *social peace* within communities and for stimulating the development of capacities and competences of individuals in the perspective of maximizing the wealth of the nation (Smith, 1776; Senior, 1852). Rather, Ricardo (1817) only once wrote concerning education as an instrument for purposes of economic distribution, while Malthus (1798) highlighted the nexus between education and demographic control.

Finally, we can identify in McCulloch’s (1864) idea of human capital as the *property* of individuals, the basis of elaborations of successive economists, especially the scholars of the Chicago school (Becker, 1964). Despite the approximate attempt of Chadwick (1862), no English classical thinker tried to hypothesise a quantification of human capital, but all started to conceive of human capital as an *accumulative stock* of resources. This anthropology clearly derives from the Lockian individualistic philosophy that has pervaded the culture of nearly the entire Anglo-Saxon world.

Chapter 3

Human Capital in the French Classical School:

A Liberal Perspective versus a Socialist One.

1. Introduction

The French classical tradition includes diverse lines of development that are difficult to group into definite movements. However, we can surely distinguish between a French liberal school and a socialist one. In the former, the sustainment of the free market induces the valorisation of human beings' entrepreneurial capacities, while in the latter the attention to social justice emphasises man's attitude to solidarity and cooperation.

2. Human Capital in the French Classical Liberal School

At the beginning of the 18th century French classical liberal school we can identify a brief and general analysis of human capital in Richard Cantillon's⁷⁹ 1730, *Essai sur la nature de le commerce en général*.⁸⁰ Secondly, Condorcet⁸¹ explained that a free economy market implies the state's duty to provide basic education to the population. According to Condorcet, education was necessary because,

it is thus again a duty of society to assure to all people the instruments for acquiring the knowledge which were attainable by their intelligent strength and their available time. It will undoubtedly resulted a bigger difference to the advantage of

⁷⁹ Richard Cantillon (1680-1734)

⁸⁰ This book was translated in English as *Essay on Nature of Trade*.

*who own more natural talent and who the luck give them the freedom to dedicate more years for the study; but if this inequality does not subject a man to another, if that represents a support to the weaker individual, without giving it a boss, that is not an evil neither an injustice: and, certainly, for a love of legacy the educated individual will want to follow the suggestions of wise men and it will want to increase the discoveries of reason.*⁸² (1791, p. 17-18)

It is clear that Condorcet's approach was more political than economic because he intended to use it to prove the connection between the education of individuals and an increase of *civic sense* to the French National Assembly, of which he was a member. Finally, Jean Baptist Say⁸³ put forth a liberal theory that emphasised the human capital of *entrepreneur*. He was in favour of having business initiatives occur in a free market economy where competition and private property were assured and in which the state did not interfere. Say formulated the famous "outlet law" which stated: "*It is thus the production that opens the outlets to the products*"⁸⁴ (1803, p. 135). In his view, trade was guided by supply, which created demand: new goods and services always spontaneously found buyers. Say thought that this was possible because workers spent all their wages on consumer goods. There then emerged the idea of the human capital of businessmen *adapting* to and *affecting* the economic system (Forget, 2001). The entrepreneur must understand the actual and future needs of people (Steiner, 1997). Say purposely rejected

⁸¹ Jean-Antoine-Nicholas de Caritat, Marquis de Condorcet (1743-1794)

⁸² The French original quotation is: "*C'est donc encore un devoir de la société que d'offrir à tous le moyens d'acquérir les connaissances auxquelles la force de leur intelligence et le temps qu'ils peuvent employer à s'instruire leur permettent d'atteindre. Il en résultera sans doute une différence plus grande en faveur de ceux qui ont plus de talent naturel, et à qui une fortune indépendante laisse la liberté de consacrer plus d'années à l'étude; mais si cette inégalité ne soumet pas un homme à un autre, si elle offre un appui au plus faible, sans lui donner un maître, elle n'est ni un mal, ni une injustice: et, certes, ce serait un amour de l'égalité bien funeste que celui qui craindrait d'étendre la classe des hommes éclairés et d'y augmenter les lumières.*"

⁸³ Jean-Baptiste Say (1767-1832)

mathematical and statistical techniques, preferring to emphasise the existence of personal values *in action*. He realised that economics is not about the amassing of data, but rather about the verbal elucidation of universal facts (for example, wants are unlimited, means are scarce) and their logical implications. Say thus reflected on the subjective character of metaphysical values in relation to the places people lived, their age and their environment (Schumpeter, 1954, p. 615-17). Samuel Gregg comments:

In this way, Say articulated the proto-personalist concern for the effects of technology on the human person ... He was not opposed to analytic technology per se but was concerned its effect on human beings ... Say would have supported the personalist understanding of a priori truths that comprise the human person, and as a Catholic, he would have been comfortable with the statement that human beings have a soul as the first a priori truth. (2002, p. 7)

For Say, entrepreneurs must engage in economic activity in order to achieve a profit. After determining the needs of people, they must manufacture and supply goods or services that will satisfy customer expectations and market the product to demonstrate its commercial benefit or appeal (Steiner, 1998). The entrepreneurs' human capital could result in a reduction of the cost of production through *improvements* in the manufacturing process and in *introductions* of new products. Say's ideas were later developed by Joseph Schumpeter (1911) and Israel Kirzner (1973). However, Say did not attribute a remarkable stress to the human capital of *common workers*, who constituted the majority of the population. He supposed that consumers act in a *deterministic* and *uncritical* way by buying the products

⁸⁴ The French original quotation is “*C’est la production qui ouvre des débouchés aux produits.*”

presented in the market; however this assumption seems a bit contradictory with the conception of people as free human beings.

3. Human Capital in the French Classical Socialist School

The 18th century French classical socialist school groups many authors, such as Pierre-Joseph Proudhon,⁸⁵ Claude-Henri Saint-Simon, Charles Fourier,⁸⁶ and Robert Owen⁸⁷ (Delabre, Gautier, 1986). They believed that the societal problems of their time were related to industrial development and the creation of a large population concentrated in the cities. Saint-Simon, particularly, maintained that the quality of *human relations* is important for the development of mankind. He rejected (1820) the idea of a natural order generated by the free competitive market, and instead promoted collectivism. His socialist plan emphasised the primacy of scientific and technological discoveries realised as a result of human creativity of *teamwork* (Jones, Anservitz, 1975). Saint-Simon wrote:

*The more needed education for people is that for performing them in the realization of their work. Therefore, some notions of geometry, physics, chemistry, and hygiene, are insatiably the knowledge more useful for an individual for managing its ordinary daily life, and it is clear that the wises who are familiar with the physic and mathematic sciences are the only ones able to plan for it a good education system.*⁸⁸ (1821, p. 267-267)

⁸⁵ Pierre Joseph-Proudhon (1809-1865)

⁸⁶ Charles Fourier (1772-1837)

⁸⁷ Robert Owen (1771-1858)

⁸⁸ The French original quotation is “*L’instruction dont le peuple a le plus besoin est celle qui peut le rendre le plus capable de bien exécuter les travaux qui doivent lui être confiés. Or, quelques notions de géométrie, de physique, de chimique et d’hygiène, sont incontestablement les connaissances qui lui seraient le plus utiles pour se gouverner dans l’habitude de la vie, et il est évident que le savants, professant les sciences physiques et mathématiques, sont le seuls en état de faire pour lui un bon système d’instruction.*”

Saint-Simon substituted the English traditional individualistic paradigm of analysis with a heterodox Christian conception of human beings (Nelson, 1991). He viewed (1825) man as originally existing in *fraternal communion* with his fellows. However, this anthropological conception denied the fact that man needs to maintain time and space for his private life. In fact, man also acquires personhood in his personal moments of reflection as well as in the cultivation of his private relation with God. For this reason, the identification of human capital with social capital implies a lack of consideration of some individual aspects of human beings. Therefore, Saint-Simon conceived the growth of human capital only as an instrument for attaining a society grounded in principles of solidarity and equality (Gentile, 1960). His notion deals with an attempt of disproving the worthiness of the paradigm of “homo economicus” in economic analysis (Bellet, 2009). Nevertheless, Saint-Simon’s beliefs leaned very far toward an anthropology based on the social nature of man by neglecting the fact that each person is an individual being endowed with freedom.

4. Conclusions

The French classical school illustrates two opposing conceptions of human beings. On one hand, the liberal authors argued that the state must provide universal education (Condorcet, 1791) for allowing persons to exploit their human capital (Say, 1803). In Say’s view, entrepreneurs might use their capacities for improving the production process and introducing new products. On the other hand, socialist scholars pointed out that the economic and civil problems of society can be exclusively solved through the diffusion of sentiments of solidarity and a sense of equality among people. Saint-Simon promoted (1821) an education focused on scientific and physical matters and sustained (1825) an idea of human capital based on cooperation and fraternity among persons.

Chapter 4.

Human Capital in the Marxist Critique to Classical School:

A Materialist Anthropology

The Marxist critique of classical political economy was based on Friedrich Hegel's⁸⁹ philosophical thesis. Hegel tried to elaborate a systematic dialectic by starting with a logical point that might have surpassed the Kantian approach, and that might have further introduced a *teleological ontology* of the succession of political facts. This approach was further developed by Karl Marx's⁹⁰ (1843) *materialistic* interpretation of history. In his principal work written in collaboration with Friedrich Engels,⁹¹ *Das Kapital* (1885), Marx demonised entrepreneurial profit and objected to the concept of private property in the name of an original heterodox conception of natural law (Peterson, 1994). Marx criticised the free market system because in that system private companies often exploit workers. He argued that the added value of products manufactured by workers was not entirely reflected by workers' wages (Andrew, 1983). Thus, a social revolution to put the means of production under state control was necessary. However, this project was deeply characterised by a *materialist anthropology*. Human dignity is eliminated through the cancellation of the employers' economic risk, the destruction of managers' organisational responsibility, the reduction of the workers' passion for their labour and an inclination to sacrifices (Veca, 1973). The bureaucratisation of society provoked empathy, disinterest and denial of responsibility for consumer satisfaction (Isotta, 2003, p. 14-46). In the name of liberation of people, Marx paradoxically empowered the authority of state within people's privacy. He *materialised* human capital because it considered man only for its material aspects. Murray Wolfson explains that the Marxist approach resulted in bigger external costs. He observes:

⁸⁹ Friedrich Hegel (1770-1831)

⁹⁰ Karl Marx (1818-1883)

⁹¹ Friedrich Engels (1820-1895)

*Labour, on the other hand, may be forced to accept conditions that are incompatible with the long-run maintenance of the health, education, and well-being of people and their children. That is to say, they may have to live off their human capital.*⁹²
(1986, p. 503)

In fact, Marx eliminated the economic incentives to chiefs and directors to be creative, as well as reduced workers' human capital to a *simple commodity* useful only for the production of goods. Marx affirmed:

*Labour-power can appear upon the market as a commodity only if, and so far as, its possessor, the individual whose labour-power it is, offers it for sale, or sells it, as a commodity.*⁹³ (1885, p. 186)

Finally, the concept of Marxist human capital can be further clarified by introducing the concept of *social product*. Individuals are considered part of a collective aggregate. They are not important in and of themselves, but are only important in how they *function* in a group that works for a supposed greater good of society – abstractly conceived (Buttiglione, 1978). Marxist reasoning implied that the individual is completely determined by the type of work he has and by the circumstances of time and space of the workplace where he operates. Marx rejected evidence that the human person always maintains his *freedom* and *dignity* (Felice, 2006). In other words, Marx judged man as a materialistic entity driven by physical

⁹² We do not know German and we thus did not read the original text of the quotation.

⁹³ We do not know German and we thus did not read the original text of the quotation.

needs but lacking a free soul. This resulted in an attempt to create “heaven on earth” by liberating the world from the evil of acquisitive materialism and human greed (Nelson, 1991). Marx believed reorganising the model of production was necessary for people to attain true freedom. Thus, he denied the existence of a *constitutive* human liberty, which cultivated the desire for integral fulfilment (Belardinelli, 1999). Secondly, Marx denied the relevance of *spirituality* in human life (Lobkowitz, 1964) by describing religion as the

*sigh of the oppressed creature, the heart of a heartless world, and the soul of soulless conditions. It is the opium of the people.*⁹⁴ (1843, p. 131)

In fact, he presupposed that,

*It is not religion that creates man but man who creates religion, so it is the constitution which creates the people but the people who create constitution.*⁹⁵ (1843, p. 30)

⁹⁴ We do not know German and we thus did not read the original text of the quotation.

⁹⁵ We do not know German and we thus did not read the original text of the quotation.

Second Section. Human Capital in the Marginalist School: A Developed Concept

Chapter 1

Human Capital in the English Marginalist School:

A Utility-Based Stock

1. Introduction

Many economic historians place the beginning of marginalism at 1871, with the publication of William Stanley Jevons's *The Theory of Political Economy* (English school) and of Carl Menger's *Grundsätze der Volkswirtschaftslehre Grundsätze der Volkswirtschaftslehre* (Austrian school). Leon Walras's *Elements of Pure Economics* (Swiss school) was published in 1874. However, Walras was the point of reference for the Marginalist School, as Smith was for the English classical one. In fact, Schumpeter stated:

Walras' system of economic equilibrium, uniting, as it does, the quality of "revolutionary" creativeness with the quality of classical synthesis, is the only work by an economist that will stand a comparison with the achievements of theoretical physics. Compared with it, most of the theoretical writings of that period –and beyond– however valuable in themselves and however original subjectively, look like boats beside a liner, like inadequate attempts to catch some particular aspect of Walrasian truth ... It would be hard to find a theorist who does not acknowledge Walras' influence. (1954, p. 827-829)

Perhaps better than others, Walras clearly and systematically explained the workings of exchange and the market in a context of *general economic equilibrium* by using the concepts of *marginal utility* (Di Taranto, 2008a). Marginal utility is defined as the amount of utility derived from the last unity of good consumed. If the marginal utility of a good is equal to that of another good, it means that individuals are indifferent to whether they consume the former good or the latter. Calculating this point of trade-off is necessary for defining the total utility (U_t) as a function in relation to the quantity (Q) of goods (x):

Formula n° 1: Total Utility Function

$$U_t = f(Q_x)$$

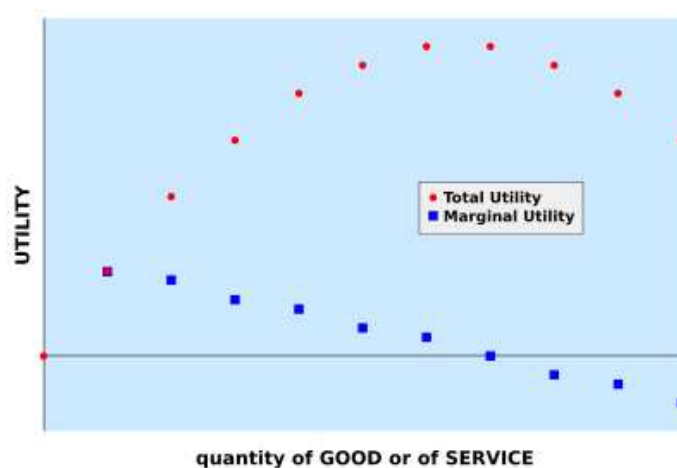
And the marginal utility U' is the ratio between the derivate of total utility (U_t) and the derivate of the quantity of goods (Q_x):

Formula n° 2: Marginal Utility Function

$$U' = \frac{\partial U_t}{\partial Q_x}$$

The function of total utility increases as long as the function of marginal utility is positive, while the former starts to decrease when the latter is negative.

Figure n° 1: The Trend of Total Utility Function and Marginal Utility Function



Concerning the point of the maximization of total utility (U_T), the marginal utility U' is reset to zero because the supply of an additional quantity of goods is indifferent for the consumer. In conclusion, the marginalist revolution introduced the principle by which the utility of an additional unit of a product in the eyes of a consumer is *inversely* related to the number of units of that product he already owns, at least beyond some critical quantity (Blaug, 1973).

Marginal utility is obviously a *subjective* measure because it depends on the characteristics of every individual. As a consequence, all marginalist economists substituted the English classical theory of value related to the amount of labour realized (Smith's division of labour) with a new one grounded in the *relativistic* importance of goods/services in relation to every individual's preferences. This happened alongside the rejection of the classical theory of economic growth as a function of an increase of production (Say's outlet law). A new theory based on the development of *consumption* (demand of goods) took its place. In Piero Sraffa's estimation, the English classical economists were more interested in the creation of

a competition system because they saw economics as “*a circular process*”⁹⁶, while the marginalist scholars were concerned with the *allocation* of resources because they conceived of economics as “*a process to only one sense from factors of production to goods of consumption*”⁹⁷ (1960, p. 21). Finally, the former analyzed macroeconomic data and saw economics as a normative finalistic science aimed at maximising the wealth of the nation, while the latter examined macroeconomic and mainly *microeconomic* aggregates (Birken, 1988) and thought of economics as a *descriptive* science “*neutral in confront[ing] of the ends of acting*”⁹⁸ (Bano, 1992, p. 188). This new positivistic configuration of economics needs experts endowed with specialized preparation and scientific language (Roncaglia, 2009). The distinctions between political economy and moral philosophy and sociology and politics became definitive when universities everywhere created specific chairs of economics. Moreover, it was during this time when academic associations for economists⁹⁹ were formed and the publication of economic reviews reached a high scientific level¹⁰⁰. At that point in history, the objectives, instruments and the methods of inquiry that economists used changed radically (Fisher R.M., 1986), so much so that Lionel Robbins stated that economics

is concerned with that aspect of behaviour which arises from the scarcity of means to achieve given ends. It follows that Economics is entirely neutral between ends; that, in so far as the achievement of “any” end is dependent on scarce means, it is germane to the preoccupations of the economist ... It assumes that human beings have ends in the sense that they have tendencies to conduct which can be defined and understood, and it asks how their progress towards their objectives is

⁹⁶ The Italian original quotation is “*un processo circolare.*”

⁹⁷ The Italian original quotation is “*un processo in un solo senso dai fattori di produzione ai beni di consumo.*”

⁹⁸ The Italian original quotations is “*neutrale nei confronti dei fini dell’agire.*”

⁹⁹ For instance, the American Economic Association and the Royal Economic Society.

conditioned by the scarcity of means ... The economist is not concerned with ends as such. He is concerned with the way in which the attainment of ends is limited. The ends may be noble or they may be base. They may be “material” or “immaterial”.” (1932, p. 24-25).

However, the marginalist economists supposed an individualistic philosophy and continued to use the English classical paradigm of “homo economicus” to describe the behaviours of economic agents. They conceived man as a selfish and hedonistic individual lacking in a social nature (Davis, O’Boyle, 1994). This human being is exclusively interested in *maximizing* the total utility he obtains through the maximisation of his marginal utility drawn from the consumption of goods and services. In fact, the marginalist economists advanced an abstract configuration of an individual available to exchange his initial endowments of goods *exclusively* when he can increase his utility with a new basket of goods (the trade-off phenomenon), respecting the condition of budget constraints (Davis, 2003). On this topic, Vilfredo Pareto¹⁰¹ said “*the individual can disappear, so long as he leaves us a photograph of his tastes*”¹⁰² (1897, p. 170). Indeed, the marginalist economists included everything within the utility function of individuals. They thought that human emotions, human sentiments, social relationships, ethical convictions, moral ideals and personal affections could be perfectly calculated through a good mathematical system of *differential* type –without admitting the hypothetical and guessed-at character of this mathematical system.

In any case, the effects of the marginalist revolution are relevant even today. The *ethical neutrality* of economic science is considered a methodological postulate. In

¹⁰⁰ For example, the *Economic Journal* and the *Quarterly Journal of Economics* were born in those years.

¹⁰¹ Vilfredo Pareto (1848-1923)

¹⁰² The French original quotation is: “*l’individu peut disparaître, tant il nous laisse une photographie de ses goûts.*”

fact, Zamagni criticized the incorporation of utilitarianism “*in the fundamentals*”¹⁰³ (1994, p. 62) of the prevailing economic literature. This epistemology has led to an economic didactic exclusively concentrated on learning mathematical and statistical procedures to apply to abstract and narrow fields of specialization and an approach to economic research that is far from economic reality. Angelo Roncaglia affirmed:

*The activity of research loses its character of participation to cultural and political life, for becoming an instrument of academic career ... at this point the theoretic debate acquires a dangerous autonomy in confront of the constant confront with the real world: to show the scientific capacities, especially through the perfect use of analytical instruments, became more important than a good practical comprehension of real issues.*¹⁰⁴
(2001, p. 406-407)

2. Human Capital in Jevons

English marginalist economists who examined the topic of human capital were partly influenced by the *favourable* socio-economic context of England at that time. The British Commonwealth system managed a lot of material, including immaterial and financial resources (Aldcroft, Richardson, 1969). During the Victorian era, the right to vote and hold public office was extended to every English male and new, important infrastructures were created for stimulating internal commercial exchanges, including laws regarding the maintenance and recognition of syndicates (Di Taranto et al, 2000). Moreover, the international exchanges were stimulated by

¹⁰³ The Italian original quotation is: “*dalle fondamenta.*”

¹⁰⁴ The Italian original quotation is: “*L’attività di ricerca perde il suo carattere di partecipazione alla vita culturale e politica, per divenire strumento di carriera accademica ... a questo punto il dibattito teorico acquista una pericolosa autonomia rispetto al confronto costante con il mondo reale: mostrare le proprie capacità “scientifiche”, essenzialmente tramite la raffinatezza nell’utilizzo degli strumenti analitici, diviene più importante di una buona comprensione “pratica” degli strumenti reali.*”

the gold standard system, which allowed for the convertibility of national currencies based on minimum and maximum values based on the value of gold. The stability of foreign currencies in England increased, as did the security of payments and the promotion of long-term investments (Screpanti, Zamagni, 1989, p. 176). Increases in the demand for goods implied a growth of the labour pool, and many people moved from the countryside to cities to work in factories. The joint-stock companies soon took the place of family property.

Jevons, the founder of this school, often used *integral* mathematical calculus and *cardinal utility*¹⁰⁵ to prove that economic development derives from technological progress. Technological progress increases the efficiency with which a resource is used and tends to increase the rate of consumption of that resource (Alcott, 2005). Thus, Jevons asked: What causes *technological progress*? He argued that the growth of human capital should be conceived as workers' capacity for improving processes and innovating output. As a consequence, Jevons set forth that the wages of employees must be *correlated* to the meritocratic importance of their contribution to the business dynamic of firm (Bowman, 1997). In his own words:

All workmen competent at the moment to be employed will be hired, and high wages paid if necessary. Every man who has peculiar skill, knowledge, or experience, rendering his assistance valuable, will be hired at any requisite cost. (1871, p. 261-262)

Then, Jevons argued (1871, p. 263) that the total amount of workers' wages must be obtained by subtracting the entrepreneur's reward for capital investment to the profit of firm and then be divided based on the criterion of the "scarcity" of the

type of contribution. In other words, one who completes important tasks has the right to receive more money than another worker who completes repetitive operations within a team of workers. We know that usually the more important tasks are *knowledge-based*, and so these are often connected to workers' levels of education and training.

3. Human Capital in Sidgwick

Along this line of thought, Henry Sidgwick¹⁰⁶ –who described himself as a Jevons's disciple (Albee, 1901, p.82)– understood that firms' demand for specialised workers would always outpace the introduction of new technological instruments for the second industrial revolution. However, he also recognised that simple people do usually not have an awareness that education “*gives an adequate return for its expenditure in the greater abundance and better quality of the skilled labour*” (Sidgwick, 1883, p. 465). Sidgwick thus invoked the *state's intervention* in the education market for its ability to persuade parents of the importance of studying, for helping them to support education costs and for stimulating national economic development. He called for state intervention, and even promoted allowing to women access to higher education and personally sustained the foundation of Newman College (the first English residential college for women) at Cambridge University, where he was working.

Second, Sidgwick distinguished between the concept of human capital as only a stock of immaterial knowledge and competences and another of human capital as *cultural method* of exploring reality. In a posthumous essay published in *The Pursuit of Culture* he stated:

¹⁰⁵ Cardinal utility allows the relative magnitude of utilities to be discussed differently than ordinal utility, which only implies that goods can be compared and ranked according to which good provides the most utility.

¹⁰⁶ Henry Sidgwick (1838-1900)

Since the most essential function of the mind is to think and know, a man of cultivated mind must be essentially concerned for knowledge: but it is not knowledge merely that gives culture. A man may be learned and yet lack of culture: for he may be a pedant, and the characteristic of a pedant is that he has knowledge without culture. So again, a load of facts retained in the memory, a mass of reasonings got up merely for examination, these are not, and they do not give culture. It is the love of knowledge, the ardour of scientific curiosity, driving us continually to absorb new facts and ideas, to make them our own and fit them into the living and growing system of our thought; and the trained faculty of doing this, the alert and supple intelligence exercised and continually developed in doing this,—it is in these that culture essentially lies. (Sidgwick, Sidgwick, 1904, p. 121)

Sidgwick argued for a type of education in which humanist teachings were combined with scientific ones (an interdisciplinary approach). In fact, at the beginning of his career, in 1874, he wrote on philosophical topics and knew that the conduct of human beings derived from his ultimate ideals. For this reason, George Stigler judged Sidgwick's approach to human capital and non-competitive behaviours as "*the best in the history of microeconomics*" (1982, p. 41).

4. Human Capital in Marshall

Alfred Marshall¹⁰⁷ was described as “*the Adam Smith of his age*” (Niehans, 1990, p. 246) in recognition of his founding of the Cambridge school of economics, whose preeminent students were Arthur Cecil Pigou¹⁰⁸ and John Maynard Keynes¹⁰⁹. Marshall established economics as an independent field of study at Cambridge and set an example by being active in offering advice to government officials by providing evidence to royal commissions (Cavalieri, 1991). However, he also developed insights and arguments regarding Sidgwick’s notion of human capital, as he recognised him as the “*spiritual father and mother*” (Dean, 1987, p. 328-329) of the concept.

Marshall mainly analyzed the relationship between human capital and social stability and pointed out that “*the wisdom of expending public and private funds on education is not be measured by its direct fruits alone*” (1890, p. 179). Marshall believed that education stimulates people’s mental process and promotes the development of a sense of curiosity, prompting a person to want to know how and why events occur. He held that the phenomenon improves the *lifestyle* of a person during his or her working hours and that, during times of leisure hones the attention and worthiness of the person in completing her tasks and developing social relationships (Tu, 1969, p. 705-707). Marshall understood that more educated people usually internalise good *moral values* by studying and learning with a spirit of collaboration for the attainment of the common good. In addition, individuals endowed with a sense of culture almost always behave in a moderate and prudent way and by looking into “*a distant event as of a nearly the same importance as if it were close at hand*” (1890, p. 217). In Marshall’s view, investments in human capital are useful for every individual and all societies because they contribute to the development of trust and reciprocity in economic affairs (Kiker, 1966).

¹⁰⁷ Alfred Marshall (1842-1924)

¹⁰⁸ Arthur Cecil Pigou (1877-1959)

¹⁰⁹ John Maynard Keynes (1883-1946)

As a consequence, Marshall supported the legitimacy of *state intervention* in market education to allow all people to perfect their innate talents and capacities for the well-being of the entire society. In his mind, the state must stimulate education, build institutes where there are none, and support the major portion of education costs. He wrote:

We must look not so much at those who stay in the rank and file on the working classes, as at those who rise from a humble birth to join the higher ranks of skilled artisans, to become foremen or employers, to advance the boundaries of science, or possibly to add to the national wealth in art and literature ... There is no extravagance more prejudicial to the growth of national wealth than that wasteful negligence which allows genius that happens to be born of lowly parentage to expend itself in lowly work. No change would conduce so much to a rapid increase of material wealth as an improvement in our schools. (1890, p. 176)

He concluded this thought with the following significant sentence:

All that is spent during many years in opening the means of higher education to the masses would be well paid for if it called out one more Newton or Darwin, Shakespeare or Beethoven. (1890, p. 180)

For Marshall, the valorisation of human capital means promoting the equality of opportunities and meritocracy in the context of a free society and rendering *vertical mobility* possible in the scenario of a free labour market (Aspkrs, 1999). If education is available to all, everyone can attain high working positions through their capabilities and efforts. On the other hand, Marshall always rejected the

hypothesis of human beings as *marketable goods*, a point that Richard Blandy (1967, p. 874) observes when he states that Marshall used the expressions of “individual’s wealth” and “human capital” in an almost interchangeable manner, especially in the older version of his *Principles of Economics*. This means that, for Marshall, the wealth of an individual coincides with his stock of knowledge and abilities.

On the other hand, Arthur Pigou, who studied under Marshall and later held his chair at Cambridge University, refers (1920, p. 600) to human capital¹¹⁰ and specifies that, in terms of the theories of the labour market, we cannot make an *assumption* regarding the fact that an employee earns a wage equal to what he would receive from another firm. In fact, we cannot be sure that a worker changing jobs would necessarily receive the same wage as that which he was paid by his previous firm (Takami, 2009). As a consequence, Pigou (1946) argued that, in order to fully analyze human capital, it is necessary to study the individual as a *consumer* (economics of welfare), rather than as a factor of economic growth.

5. Conclusions

The English marginalist school presented interesting insights of analysis concerning human capital. Adherents argued that the acquisition of individuals’ scientific knowledge was on the basis of the technological discoveries, which causes economic growth (Backhouse, 2006). As a consequence, they suggested specialisation in manpower in order to improve the efficiency of the machines of production (Sidgwick, 1883) and adopting a meritocratic system for wage determination in relation to the importance of the task completed by the worker (Jevons, 1871, p. 261-263).

¹¹⁰ Pigou first used the term “human capital” when citing a sentence from *Works and Wages* by the economist Sydney Chapman.

Although they defended the principle of free competition in the economy, they justified an *active role* by the state in terms of education marketing, communicating to parents the value of studying and helping them to support the costs of education (Sidgwick, 1883; Marshall, 1890). In fact, they argued that society gains many advantages from the growth of human capital, such as social stability, worthiness in intrapersonal relations and wise and moral behaviours in trade and working contexts (Kiker, 1966).

Moreover, we must distinguish Sidgwick's proposal of giving young people both a scientific and a humanist preparation so as to render them capable of exploring reality with a far-reaching cultural approach (Sidgwick, Sidgwick, 1904). Rather, Marshall (1890, p. 176-180) endorsed the expediency of the perspective of societal well-being and of establishing an education system grounded in equality of opportunities among rich and poor people. He favoured constructing a meritocratic system of labour market (vertical mobility). In contrast, Pigou (1920) reversed the point of view by advancing methodological perplexities based on theories of labour market dynamics in an attempt to lead the topic of human capital in a scenario of economics of welfare (Pigou, 1946).

However, the English marginalist scholars did not view education and training as private and positional goods, even if they advanced an economic theory based on the idea of 'scarcity'. This constitutes a *paradox* because, on one side, Jevons, Sidgwick and Marshall used the paradigm of utility to determine the value of all economic stock and yet, on the other hand, they argued that human capital cannot be treated based on the new economic instrument of analysis. As a consequence, we can affirm that, in the English marginalist school, there is an epistemological *contradiction*. While the general statement of marginalism states that economics is a neutral science independent from the ends of acting and consequently capable of analyzing all economic dynamics, the evidence proves the incapacity of examining the economic stock of human capital through a utility instrument.

Chapter 2

Human Capital in the Austrian Marginalist School: An Evolutionary Approach

1. Introduction

The Austrian marginalist school was founded in chief by Carl Menger¹¹¹ (1871), who developed the minimal regulation view of the market (natural law tradition) promoted by the Spanish Late-Scholastic moral theologians (Chafuen, 2003b) and by the French classical liberal economists (Dolan, 1976). Menger spelled out the subjective basis of economic value and fully explained the theory of marginal utility. He viewed economics as a science of *individual choices* based on *deductive logic*. These choices, in Menger's opinion, are determined by individual *subjective preferences* and the margin on which decisions are made. As a consequence, deductive logic is regarded as the essential building block for the development of a universally valid economic theory (Machlup, 1982).

Menger introduced to economics the paradigm of the 'acting individual'. This anthropological conception describes man as a free being endowed with rationality who chooses among alternative possibilities of action in daily life in a context characterized by *psychological* influences (von Hayek, 1968). In fact, the "acting individual" makes decision, produces things and experiences sentiments in a society where many other individuals are acting and where planned and unpredictable contingent factors affect him and others (Koppl, Mongiovi, 1988). Therefore, in the Austrian perspective, an individual is someone who wants to maximize his utility by satisfying his preferences but sometimes can make *mistakes* by attaining sub-optimal performances.

Since the 1930s, no economists from the University of Vienna or any other Austrian University have been leading figures in the marginalist movement

¹¹¹ Carl Menger (1840-1921)

(Boettke, Leeson, 2003). In the 1930s and 1940s, the Austrian marginalist school moved to Britain and United States, and scholars associated with the approach were working primarily at the London School of Economics (1931-1950), New York University (1944-), Auburn University (1983-) and George Mason University (1981-). However, in this paper we limit our analysis only to Ludwig von Mises¹¹², Joseph Alois Schumpeter¹¹³ and Friedrich von Hayek¹¹⁴ because their work is particularly concerned with the topic of human capital. Nevertheless, we must remember that many other remarkable scholars, such as Fritz Machlup¹¹⁵, Ludwig Lachmann¹¹⁶ and Murray Rothbard¹¹⁷ also belong to the Austrian marginalist school.

2. Human Capital in von Mises

Von Mises was an economic advisor to the Austrian Chamber of Commerce when he published *Theorie des Geldes und der Umlaufsmittel*¹¹⁸ in 1912. In it, he contrasted the point of the inexplicability of the ‘price’ of money through the instrument of subjective economic valuations of individuals promoted by Eugen von Böhm-Bawerk’s¹¹⁹ theory of capital and interest (1880-1884), which was derived from Menger’s theory of higher-order goods –how the value that consumers place on final products determines the value of goods higher up in the production process. Indeed, von Mises proved that purchasing power is constituted by the intensity of consumer demand for a specific economic good as opposed to another good. With this in mind, von Mises formulated the *regression theorem*, according to which the demand of money initially arises out of its commodity-exchange past. In 1913, von Mises was appointed to the faculty of the University of

¹¹² Ludwig von Mises (1881-1973)

¹¹³ Alois Schumpeter (1883-1950)

¹¹⁴ Friedrich von Hayek (1899-1992)

¹¹⁵ Fritz Machlup (1902-1983)

¹¹⁶ Ludwig Lachmann (1906-1990)

¹¹⁷ Murray Rothbard (1926-1995)

¹¹⁸ This Misesian work was translated into English with the title *The Theory of Money and Credit*.

¹¹⁹ Eugen von Böhm-Bawerk (1851-1914)

Vienna, but his career was interrupted for four years during World War I when he was called to serve in the German Army.

2.1 Von Mises's Human Capital in *Sozialismus*

At the end of the war, von Mises returned to work at the University and published *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus* (1922), which focused on the problem of socialism. Here, he conceived of economics as the science of the *allocation* of scarce resources to satisfy human needs and believed that the level of scarcity of a good is quantified by the amount of its relative price in the context of a free market¹²⁰. Instead, he argued, socialism neglected the private property of goods and promoted a planned economy where the prices were not free. As a consequence, the socialist theory does not provide to central planners any indication of the relative scarcities of resources (Herbener, 1991). These planners, in turn, find themselves lacking knowledge and information and thus cannot rationally allocate the factors of production to their most efficient use (Murrell, 1983). Many years later, von Mises commented that his criticism against socialism “*was not new; it was merely a logical conclusion from the theory of subjective value*” (1978, p. 111).

The Mengerian subjective (and relativistic) theory of value affirmed the impossibility of determining value by a collective entity. As Peter Boettke and Peter Leeson (2006a) have observed, value is thus exclusively related to the satisfaction of the preferences of every individual in the *contingent context* of space and time where one makes decisions. For example, the value of a glass of cold water is subjective because the marginal utility of it is higher in the middle of Sahara Desert for a thirsty and tired tourist than it is for the same individual in the city during a normal working day. Von Mises (1927) explained that value does not

¹²⁰ In von Hayek's famous example, when people notice that the price of tin has risen, they do not need to know whether the cause was an increase in demand for tin or a decrease in supply. Either way, the

exist apart from an *individual valuer* who ranks the relative importance of his ends and the relevance of instrumental objectives for them in light of his human capital, which is conceived as his individual *history* and his individual *character* (Hoppe, 1996). The subjective valuation of every individual united with those of other individuals in action gives place to the market. What is there beyond the process of the formation of subjective valuations? What factors influence the construction of individuals' preferences? Although von Mises did not use the expression 'human capital', he referred to this concept to refer to all *psychological* and *ethical* factors contained within the human brain. These elements actually determine every individual's choices, even if their impact depends partly on the institutional context built by preceding generations of people and by the actions of other individuals (Salerno, 1990). However, von Mises also recognized the metaphysical character of the elements that compose human capital and avoided judging their morality. He stated:

Utility ... includes all human ends, regardless of whether the motives of action are moral or immoral, noble or ignoble, altruistic or egoistic. (1922, p. 113)

From a methodological point of view, von Mises (1933) argued that the primary task of economic analysis is to make economic phenomena intelligible by basing it on individual purposes and plans, while the secondary task of economic analysis is to trace the *unintended consequences* of individual choices. In von Mises' view, human capital is a series of psychological and ethical preferences that can be inserted into a utility function and ranked on an *ordinal scale* (not by a cardinal one). Indeed, von Mises favoured the application of mathematics to economics for *ranking* the marginal utility of different choices, however he contemporaneously

increase in the price of tin leads them to economize on its use. Market prices change quickly when

argued against positivistic logic in economics (Boetkke, Leeson, 2006b). He was a positive, but not a positivistic, economist because he argued that some economic topics –especially those related to subjective psychology as human capital– were not analysable with the quantitative instruments of prediction used in the natural sciences (Batemarco, 1998). In fact, because von Mises considered economics an independent social science, he rejected the scientific method of causal principles of phenomena used in physics.

In a free market society, every type of exchange takes place because of the different valuations that goods and services receive from sellers and buyers (de Soto, 2001). In common situations, the former has different preferences than the latter, and so he exchanges the goods or services for money. Sellers and buyers both maximize their utility by *freely* determining the *price* of exchange (an efficient allocation of resources). On the other hand, if the buyer and the seller have the same human capital because they have experienced the same type of personal history (such as cultural background and family upbringing) and live in the same cultural and geographical contexts, they could perhaps attribute the same value to the good or service and they will not exchange it. Human capital is thus something that determines an individual's choices and contemporaneously is something that is determined by an individual's characteristics and life contexts. In this regard, von Mises stated:

The purpose of action is to attain success in the world that is our environment. Adjusting to the conditions of this world and its order is therefore expedient in any case. If the human mind can give birth to rules of the game that are useful in this adjustment, then only two explanations remain open: either there is something in our minds that belongs to the environment and permits us to understand it –an “a priori”; or the environment

underlying conditions change, which leads people to adjust quickly.

plies our minds with rules that enable us to deal with it. In no case is there room for arbitrariness and convention. Logic is either active within us or effected within us. It affects the world through us, or the world affects us through it. Logic is the stuff of the world, of reality, and of life. (1940, p. 109)

In this way, von Mises introduced the theory of “catallactics”¹²¹ (market interaction) as the result of an integral, dynamic process of human action in an environment of *freedom*. The process is *dynamic* because it changes every second as all individuals in the world apply the preferences of human capital. If this process is manipulated or controlled partially or totally by political action through an alteration of prices’ natural trends –central planning, growth of taxation, fiat money or complication of bureaucracy–, with the noble intent of improving social cohesion, the process is no longer dynamic (von Mises, 1944a; 1944b). It becomes static, predetermined and dead because it is no longer a reflection of the individuals’ subjective valuations of the marketplace. In fact, von Mises (1929) considered the expediency of state abstention in the workings of the market just at the beginning of his career.

2.2 Von Mises’s Human Capital in *Human Action*

We know that, in the late 1930s, after suffering the worldwide Depression, Austria was threatened by a Nazi takeover. von Mises had already moved to Geneva to teach and write at the International Institute for Graduate Studies, and he later emigrated to the United States. There, he became deeply aware of the duty of an economist to elaborate a series of *systematic thoughts* capable of embracing macroeconomics, microeconomics, monetary economics, labour economics, financial economics, international economics and so forth. In other words, von

¹²¹ Catallactics derives from the original Greek meaning of the word “katallaxy” –exchange and bringing a stranger into friendship through exchange.

Mises judged indispensable the ability to identify a *point of unity* among the branches of economic science, obviously maintaining the specializations of different fields of research and teaching. In *Human Action* (1949), he set forth that the paradigm of the ‘acting individual’, saying that he is the more apt instrument for expressing the application of an individual’s human capital in the dynamic of all his actions. He stated:

Choosing determines all human decisions. In making his choice man chooses not only between various material things and services. All human values are offered for option. All ends and all means, both material and ideal issues, the sublime and the base, the noble and the ignoble, are ranged in a single row and subjected to a decision which picks out one thing and sets aside another. Nothing that men aim at or want to avoid remains outside of this arrangement into a unique scale of gradation and preference. The modern theory of value (subjective value) widens the scientific horizon and enlarges the field of economic studies. (1949, p. 3)

von Mises thus proposed a ‘praxeology’ of human action. Praxeology provides instruments of observation to explain what individuals want by acting in one way rather than in another (Gonce, 1973). Praxeology remains *silent* concerning the characteristics of an actor’s human capital (psychological internal states, emotional experiences, ethical beliefs and moral values) but assumes that every individual always acts because he wants to improve his state of affairs. For von Mises, every human subject continuously tries to change a less desirable state of affairs into a more desirable one (Aranzadi, Rodríguez, Turmo, Vara, 2009). Acting thus consists of selecting a pattern of behaviours designed to further the actor’s purpose.

Choosing not to act also constitutes a modality of action represented by a wanted absence of actions aimed to the actor's purpose. Misesian action is always *rational*, *purposeful* and *selfish* (Caldwell, 1984) because in von Mises's mind, human actions may or may not come into conflict with moral norms and can be unsuccessful because individuals sometimes make mistakes or harbour unfair expectations and unjust judgments (Beaulier, Center, Prychitko, 2001). In fact, von Mises conceived of human decisions as *free* actions made by creative individuals and not by static and perfectly predictable "homo economicus" because he recognized that a real decision among alternative choices supposes a concrete individual and not just his abstract preferences. He rejected the *mechanical* vision of human action proposed by the English marginalist school and the Chicago marginalist one, so much so that he stated:

Economics deals with the real actions of real men. Its theorems refer neither to ideal nor to perfect men, neither to the phantom of a fabulous economic man nor to the statistical notion of an average man. Man with all his weaknesses and limitations, every man as he lives and acts, is the subject matter of catallactics. Every human action is a theme of praxeology.
(1949, p. 651)

In any case, for von Mises, individuals are *isolated* beings who live in community only for self-interest. In this way, he did not take into account the importance of possible returns or even *per se*: the returns of relational goods, personal affections, altruistic behaviours, moral values and religious experiences (Gui, 2000). He actually thought that human individuals' aims in all aspects of life –including those just cited– moved toward a selfish attempt to improve personal welfare. Consequently, von Mises introduced the idea of *methodological*

individualism, which is not a claim of private space in the economic sphere or an emphasis on the atomistic constitution of society, but rather the instrument of economic research for discovering and understanding subjective human capital of individuals as it exists *beyond* their actions.

von Mises's approach was seriously criticized by Mark Blaug (1980, p. 93) for its unjustifiable *idiosyncrasy* against people and by Paul Samuelson for "*the exaggerated claims ... for the power of deduction and 'a priori' reasoning*" (1964, p. 736). In von Mises's view, a prioristic theoretical knowledge is based on *self-evident* axioms that emerge from the end-directed nature of human actions. von Mises argued that is always true the principle that individuals prefer goods sooner than later as well as that of disutility of labour. However, these reflections cannot pretend to be universal. For example, a morally good person prefers to have a good later than sooner when that allows her to not compromise her dignity. We think that it is true that man operates for his own interests, but he also makes things for unselfish purposes, such as affective sentiments, philosophical ideals and religious beliefs. Finally, the Misesian approach *did not recognize* the autonomous subjectivity of intermediate bodies, such as families, associations or groups (Zanotti, 1998). These social realities are conceived only as creations of individuals to help them attain their goals. Yet, they are also places where people reciprocally influence one another, communicate their life experiences and develop their knowledge of reality (Donati, 2007). Here, human capital can flourish by learning the practice of civic virtues and by developing an innate attitude toward good social relations with others (Colombo, Merzoni, 2008).

3. Human Capital in Schumpeter

The collocation of Schumpeter within the Austrian marginalist school is quite *controversial*. In fact, some historians of economic thought argue that Schumpeter,

although he studied at Vienna University and had Friedrich von Wieser¹²² as his academic advisor, does not belong to the Austrian marginalist school. They maintain that Schumpeter preferred an approach of economic analysis grounded in history and statistics, with the exception of his *Das Wesen und der Hauptinhalt der theoretischen Nationaloekonomie*¹²³ (1908), where it is clear he favoured the promotion of methodological individualism and Walrasian economic equilibrium. In addition, they observed that Schumpeter's theories are primarily oriented to *supply dynamics* in a way that differs from the view held by other Austrian marginalist authors. On the other hand, we agree with the scholars who include Schumpeter among the preeminent authors of the Austrian marginalist school. In fact, Schumpeter (1959, p. 827-829) always praised the intelligence of Menger's ideas –although he goes beyond them– and built all of his theories on the paradigm of the 'acting individual' (Machlup, 1951). Schumpeter enlarged the concept of human being by attributing to it psychological features (e.g. the entrepreneurial idea) and empirical characteristics (e.g. the application of innovation) and tried to create a systematic and dynamic vision of economics from the perspective of a unity of knowledge with the other sciences (Shionoya, 1997).

3.1 Schumpeter's Human Capital in the Young Trilogy

After earning his law degree, Schumpeter began attending von Böhm-Bawerk's seminars, for which he wrote several papers (1905a; 1905b; 1905c; 1906). Then, he worked in Vienna and at many other European universities until his 1932 departure for Harvard University, in the United States. This geographical transfer coincides with the *boundary line* between the young and the mature trilogies (Stolper, 1994). In fact, between the last work of the former and the first of the latter, Schumpeter remained *silent* for 25 years.

¹²² Friedrich von Wieser (1851-1926)

¹²³ This Schumpeterian work was translated into English as *The Nature and Essence of Theoretical Economics*.

In the young trilogy, the 1908 work was dedicated to methodological issues, the 1911 one to the factors of economic development and the 1914 to a brief history of the social sciences. Schumpeter mainly analyzed the topic of human capital in *Theorie der wirtschaftlichen Entwicklung*¹²⁴ (1911). In it, he emphasized the human capital of an entrepreneur, moving forward from Mengers' generally static economic equilibrium by challenging the existing structures and setting industrial dynamics and economic development into motion (Becker, Knudsen, 2002). Schumpeter divided the process of economic development into three stages:

- i) *Invention*, which is intended as the technical discovery of new things or new ways of doing things;
- ii) *Innovation*, which refers to the successful commercialization of a new good stemming from technical discoveries or a new combination of knowledge; and
- iii) *Imitation*, which regards the adoption and diffusion of new products or processes to markets.

The separation between the first and second parts of the economic development process is interesting because it implies that the creation of technological opportunity is typically presented *outside* the domain of the entrepreneur. Schumpeter always supported this theory (Ebner, 2006). In one of the final papers of his career, we find this affirmation:

The inventor produces ideas, the entrepreneur “gets things done” ... an idea or scientific principle is not, by itself, of any importance for economic practice. (Schumpeter, 1947, p. 149)

¹²⁴This Schumpeterian work was translated into English as *The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle*.

In Schumpeter's (1911) opinion, an inventor's human capital is constituted by his capacity to elaborate an invention, while that of an entrepreneur is represented by the ability to identify and exploit the opportunities of the market. Invention can be regarded as the production of new output, the introduction of a new method of production, the opening of a new market, the conquest of new sources of supply for raw materials or the realisation of changes within a business organization. Innovation is the concrete application of an invention, while imitation is the diffusion of the innovation in the market (McCraw, 2007). Innovation and imitation serve as the moral justifications for entrepreneurs' profits because they are related to the economic risk of introducing new outputs to the market. However, the *vertical integration* of the stages of invention and those of innovation and imitation brings about economics of scale and complementary knowledge assets (Grossman, Hart, 1986). However, Schumpeter advised:

Economic leadership in particular must hence be distinguished from "invention". As long as they are not carried into practice, inventions are economically irrelevant. And to carry any improvement into effect is a task entirely different from the inventing of it, and a task, moreover, requiring entirely different kinds of aptitudes. Although entrepreneurs of course may be inventors just as they may be capitalists, they are inventors not by nature of their function but by coincidence and vice versa ... it is, therefore, not advisable, and it may be downright misleading, to stress the element of inventions as much as many writers do. (1911, p. 88-89)

On the other hand, bankers must respond to the financial risk of supporting the business plans proposed by entrepreneurs. In Schumpeter's view, entrepreneurs and

bankers do not have the wealth of their purpose, but rather aspire to *social ascent* and are encouraged by the joy of creating, the pleasure of victory over their competitors and the awareness of their role as heads of economic dynamics (Frank, 1998). The Schumpeterian theory of entrepreneurship has one chief policy implication: how to stimulate in practice the advent of more individual, entrepreneurial acts.

The Schumpeterian theory of economic development opened a field of specific research in literature (Blaug, 2000; Shane, Venkataraman, 2000). Frank Knight¹²⁵ (1921) adjusted it in the perspective of fusion between the figure of an inventor and that of an entrepreneur in an attempt to reduce the uncertainty of economic risk through the immediate realization of suitable modifications to an original invention in conformity to the needs of the market before the commercialisation of the output. On his side, Israel Kirzner¹²⁶ (1973) contrasted the Schumpeterian thesis by arguing that entrepreneurs move the economy toward equilibrium by taking advantage of arbitrage possibilities (such as the misallocation of resources) created by exogenous changes or errors made by other market decision-makers. In Kirzner's (1999) opinion, the human capital of the entrepreneur is characterized by *alertness*. For this purpose, one must possess creativity, imagination, the ability to anticipate events and identify the right sources of knowledge about market data. Kirzner pointed out the "*analytical essence*" (1999, p. 12) of an entrepreneur's human capital, extended his analysis of entrepreneurial function from the Schumpeterian single period to a multi-period equilibration and identified in the pure profit the end in itself of entrepreneurial activity.

3.2 Schumpeter's Human Capital in the Mature Trilogy

During his tenure at Harvard University, Schumpeter wrote three important books (in 1939, 1942 and 1954) and was recognized everywhere as one of the leading

¹²⁵ Frank Knight (1885-1972)

economists who provided an alternative to Keynes's (1890; 1926; 1936) revolution. Schumpeter shifted his scientific interests to a small degree to analyse the history of capitalism by using statistical data referring to economic history. In his 1939 *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*, Schumpeter shifted his attention from the human subject of the entrepreneur-innovator to the non-human topic of innovation (Langlois, 2003). In fact, as in United States he faced a capitalism that tended to be more oligopolistic than that of Europe (Romer, 1996), he thought that the notion of invention could be transformed into innovation and then into imitation by big firms, big research centres and, in some cases, by states. This implies a *de-personalization* of the 'acting individual' in his young vision of economic development.

Instead, in 1942's *Capitalism, Socialism and Democracy*, Schumpeter set forth the more adequate political and institutional *context* wherein the human capital of an entrepreneur was embodied in the staff of big organizations and could flourish and develop (Thornton, 1999). He observed that capitalism was going towards its death on account of the diffusion of a new culture in the market. Schumpeter believed that American intellectuals were persuading people that capitalism was not a moral economic system and thus rendering them less alive and engaged in working activity. On the other hand, he noted that, in socialist countries, the firms were always more incapable of efficiency as a result of the internal growth of bureaucratisation, which caused inefficient routines.

As a consequence, Schumpeter judged it his mission to reinforce the principle according which economic development proceeds through a human capital sequence of invention-innovation-imitation in which *free competition* acts selectively. This process of a constant creation of the market was called "creative destruction" (Buchanan, Vanberg, 1991). Regarding this, Schumpeter stated:

¹²⁶ Israel Kirzner (1930-)

Economists are at long last emerging from the stage in which price competition is all they saw. As soon as quality, competition, and sales effort are admitted in the sacred precincts of theory, the price variable is ousted from its dominant position. However, it is still competition within a rigid pattern of invariant conditions, method of production and forms of industrial organization in particular, that practically monopolizes attention. But in capitalistic reality ... it is not the kind of competition which counts but the competition for the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance) – competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms, but at their foundations and at their very lives. (1942, p. 85)

This position actually reverses the order of the Walrasian account. The convergence of prices to levels that ensure an equilibrium between supply and demand –the central component of Walras’s theory– is regarded as being of secondary importance. The main problem, Schumpeter contends, is that of competition as a *selective* procedure that singles out the best mode of production (Foster, 2000). So, even if he declared himself to be a great admirer of Walras’s general equilibrium approach, Schumpeter fully incorporated into his theory the competition features focused on by the Austrians: learning (innovation), selection and incentives, all of which play a fundamental role in the picture (Metcalf, 1988). Schumpeter viewed competition as giving rise to the continuous redistribution of resources and wealth among individuals, expelling those found to be unfit from the market (Santarelli, Pesciarelli, 1990). Competition creates and destroys fortunes, jobs and wealth, and therefore is the fundamental source of the rise and fall of economic institutions.

As a consequence, in Schumpeter's view, we can identify a dynamic and evolutionary concept of human capital that is grounded on an individualist and selfish anthropology. The social nature of human being is neglected to the point that Schumpeter never emphasised the relevance of *intermediate bodies* in the growth of human capital. As his preoccupation is exclusively that of making the economy work by increasing the material well-being of society, Schumpeter believed that the vocation of every man should be to accumulate as much wealth as possible. On contrary, the evidence proves that every human being desires to be *integrally* fulfilled. This means that man's human capital is also related to the cultivation of unselfish social relationships, the test of happy emotions and sentiments, the practice of moral behaviours and the experience of religious journeys.

4. Human Capital in von Hayek

Friedrich von Hayek studied at Vienna University during its academic heyday (Antiseri, 2000; Aa.Vv., 2000). In 1931, he left to work at the London School of Economics and Political Science, and in 1950 he was called to the United States for a position at the University of Chicago. During his entire career he conceived human capital as *tacit knowledge* by influencing and at the same time by being influenced by the theories of inarticulate knowledge of Gilbert Ryle¹²⁷ and Michael Polanyi¹²⁸. In fact, Ryle (1949) introduced a configuration of human capital as the ability to do something, that is, the learning of *know-how*. He referred (1949, p. 40) to a stock of knowledge that can be analyzed through a *costs-benefits calculation*. On the contrary, Polanyi (1958) argued for human capital constituted by an unexpressed process of mastery based on *experience* and *skilful coping* (Cohen,

¹²⁷ Gilbert Ryle (1900-1976)

¹²⁸ Michael Polanyi (1891-1976). von Hayek remembered Polanyi's years in Chicago with the following in his 1978 interview with James Buchanan (quoted in Mirowski, 1998): "*Polanyi was for a few years my colleague on the Committee on Social Thought at the University of Chicago, and there was an interesting relationship for a period of ten years when we happened to move from the same problem to the same problem. Our answers were not the same, but for this period we were always just thinking about the same problems. We had very interesting discussions with each other, and I liked him personally very much.*"

Levinthal, 1990). He explained (1966) that these human capabilities have a practical character because they consist of understanding how to get along with people, how to care for things, how to look at news and so on. Clearly, this type of knowledge is formed by an active and personal involvement in knowing and almost always remains *implicit* –we know but we cannot tell (Jacobs, 1999). To this end, Polanyi wrote:

Tacit knowledge is the fundamental power of the mind, which creates explicit knowledge, lends meaning to it and controls its use ... The ideal of a strictly explicit knowledge is indeed self-contradictory; deprived of their tacit coefficients, all spoken words, all formulae, all maps and graphs, are strictly meaningless. An exact mathematical theory means nothing unless we recognize an inexact non-mathematical knowledge on which it bears and a person whose judgment upholds this bearing. (1969, p. 156)

Polanyi (1969, p. 148) thought that human capital implies that people *dwelt in* things. In this way, the human being extends his knowledge of the world beyond his bodily existence¹²⁹ (Loasby, 2002).

On the other hand, more or less in that period, Herbert Simon¹³⁰ (1947) also argued that studying economic organizations meant examining concrete human actions. He observed (1957) that the common human experience proves that men

¹²⁹ For instance, we can examine the human capital of a blind man. When he first faces a stick, he attempts to understand it. He learns how to use it and tries to master it. After learning how to use the stick, he no longer pays attention to it. It becomes an extension of his bodily existence. He directs his attention to things the stick touches. He begins to find his way with its help. The stick becomes transparent for him and remains there and shapes the blind man's explicit understanding of the stick. He begins to indwell in it.

¹³⁰ Herbert Simon (1916-2001)

make decisions using a human capital characterised by a *bounded rationality*. In fact, people have cognitive constraints in their own minds, receive a limited amount of information regarding matters and conditions of decisions and take of a finite amount of time to make decisions. Bounded rationality implies the substitution of the assumption of the principle of efficiency maximization in human decisions in favour of the criterion of satisfaction (Simon, 1972). Actually, an economic agent adopts his 'heuristic' capacity to make decisions: he seeks the best satisfactory solution in response to his needs in a precise context (Rothbard, 1989). However, we can analyze von Hayek's contribution regarding human capital most deeply by following the chronological order of his work.

4.1 von Hayek's Human Capital before *The Sensory Order*

von Hayek first became interested in psychology in 1920, while he was working toward his law degree, and he wrote a paper on the nature of consciousness and the mind (Vaughn, 1994, p. 121, note 1). However, he put the paper aside and turned to economics for practical reasons. Until the mid 1930s, he did not emphasise the important role of tacit knowledge and bounded rationality in his view of human capital (Caldwell, 2004, p. 136-139). Later, in *The Socialist Calculation II: The State of the Debate* (1948a), von Hayek developed the relationship between *local knowledge* of every individual and its inference to inarticulate knowledge (Zappia, 1996). He argued that no single person has all the knowledge necessary for economic calculations inside her head at any time, including the practical ability to do things. He stated:

Much of the knowledge that is actually utilized is by no means "in existence" in this ready-made form. Most of it consists in a technique of thought which enables the individual engineer to find new solutions rapidly as soon as he is confronted with new

constellations of circumstances. To assume, the practicability of these mathematical solutions, we should have to assume that the concentration of knowledge at the central authority would also include a capacity to discover any improvement of detail of this sort. (1948a, p. 155)

Second, for von Hayek (1948b), the *dissemination* of knowledge in society is decisive for the understanding of the impracticability of planning an economy. No individual (or authority) can accumulate a sufficient quantity of codified information to indentify and attain the optimal choice for himself and other people (Caldwell, 1997). In fact, for von Hayek, individuals' human capital is not only constituted by factual knowledge but also by some elements not determinable by the pure logic of codification. Mankind's human capital depends on individual's historical experiences, emotions and sentiments and the institutional contexts where the individuals live. In *Economics and Knowledge* (1948b), von Hayek thus pushed forward the impossibility of articulating human capital. This provides the ground for the achievement of *spontaneous order* (Bladel, 2005). In fact, in free interactions of exchange, individuals reciprocally communicate the bits of explicit and implicit knowledge they have and dynamically adapt their actions to others' economic needs. Consequently, it becomes possible to reach an equilibrium through processes of disequilibrium.

von Hayek demonstrated that the more efficient a market is in confronting economic planning, the greater the capacity to bring the details of everyday economic life (local, implicit and private knowledge of individuals) into public use and thus to enhance the talents and the human capital of every individual who puts himself into motion. In his own words:

The shipper who earns his living from using otherwise empty or half-filled journey of tramp-steamers, or the estate agent whose whole knowledge is almost exclusively one of temporary opportunities, or the arbitrageur who gains from local differences of commodity prices-are all performing eminently useful functions based on special knowledge of circumstances of the fleeting moment not know to others. (1948a, p. 80)

von Hayek underlined the importance of an individual's practical understanding of the situation he faces because economic knowledge, especially implicit knowledge, is *embedded* in practices, shared skills, institutions and habits. In fact, human capital includes a set of explicit and codified competencies, capacities, abilities and procedures and a portion of implicit and local knowledge. This last type of knowledge is often *unconscious* and can be embedded in skills, although it does not coincide with skills. Finally, von Hayek advanced his analysis in *The Counterrevolution of Science* (1952a), where he affirmed:

Indeed any social processes which deserve to be called "social" in distinction to the action of individuals are almost "ex definition" not conscious. In so far as such processes are capable of producing a useful order which could not have been produced by conscious direction, any attempt to make them subject to such direction would necessarily mean that we restrict what social activity can achieve to the inferior of the individual. (1952a, p. 88)

4.2 Von Hayek's Human Capital in *The Sensory Order*

In 1952's *The Sensory Order*, von Hayek began to attribute more importance to philosophy in his argumentations. He thus focused his attention on human capital by pointing out the dependency of explicit knowledge from tacit knowledge. In fact, the book deals with the interpretation and the limits of knowledge by discussing the inarticulability and pervasiveness of human capital. For von Hayek, an individual's human capital is constituted by the *sensory qualities* that organise his activity. He affirmed:

The order of the sensory qualities is difficult to describe, not only because we are not explicitly aware of the relations between the different qualities but merely manifest these relations in the discriminations which we perform, and because the number and complexity of these relations is probably greater than anything which we could ever explicitly state or exhaustively describe, but also because, as we shall see, it is not a stable but a variable order. (1952b, p. 39)

Every human mind responds to a hidden and unconscious *mental order* influenced by personal history, institutional context and the environment of life (Butos, 1997). The meaning that individuals place on things, practices, places and people determines how they will orient themselves in making decisions. Economics must thus be oriented to the comprehension of reality and not to its prediction. Economics can achieve this goal because we are what we study, or because we possess knowledge from within. We can understand the purposes and plans of other human actors because we are ourselves human actors. The mind's implicit and abstract rules are spontaneously applied on external reality by shaping knowledge (Khalil, 2002). Therefore, the Hayekian notion of human capital presents a

subjective and *relativistic* character because it refers exclusively to the psychological nature of every individual (Butos, McQuade, 2002, p. 116). In this view, all types of experience, including religious ones, are based on “*a set of relations by which our nervous system classifies them*” (Hayek, 1952b. p. 142), so much so that von Hayek stated:

A certain part at least of what we know at any moment about the external world is therefore not learnt by sensory experience, but it is rather implicit in the means through which we can obtain such experience; it is determined by the order of the apparatus of classification which has been built up by pre-sensory linkages. What we experience consciously as qualitative attributes of the external events is determined by relations of which we are not consciously aware but which are implicit in these qualitative distinctions, in the sense that they affect all that we do in response to these experiences. (1952b, p. 167)

As a consequence, we criticise von Hayek for his rejection of the human subject’s desire to go beyond psychological reality and for trying to respond to his innate *openness to transcendence* (Sandonà Lu., 2010b). In addition, although von Hayek believed that experiences influence people’s human capital because they direct the individual’s path, he unjustifiably undervalued the idea that the map of experiences provides a *criterion of guidance* for the future (Mirowski, 1998). In his thought experiences are considered only intentional acts instead –as Polanyi demonstrated (1958)– they are *circular flows* between the person and the world (Polanyi, 1958; 1969). More precisely, von Hayek argued that one takes intentional mental perceptions, which can be irrational, and processes them rationally. He thus had some hope for the possibility of “*building a machine fully reproducing the*

action of the brain and capable of predicting how the brain will act in different circumstances” (1952, p. 189). Rather, we agree with Polanyi (1969) regarding the fact that things already have a perspective when they are received. This evidence shows the existence of an intentional arc between the person and experienced reality. The mind’s abstract rules no longer stay there as separately describable entities, but instead are embodied in concrete actions (Egidi, Rizzello, 2004). Finally, there is confusion regarding von Hayek’s acceptance of the mind-body anthropological *dichotomy*. von Hayek argued that the mind’s characteristics shape the body’s behaviours, as if the individual is an embedded spirit. This is only partly true because the needs and the wants of body influence even the mental and psychological ideas of the mind. For example, a man in love increases his mind’s sentiments when he kisses his beloved for the first time. In fact, economic personalism, as we will see, confirms the Aristotelian-Thomist ‘holistic theory’, according to which the mind and the body are two aspects of the same entity; the human being is a *dual-unity* (Marangoni, Solari, 2010).

4.3 Von Hayek’s Human Capital after *The Sensory Order*

After publishing *The Sensory Order*, von Hayek shifted his interest toward the development of an evolutionary economic theory of spontaneous order. However, in *The Constitution of Liberty* (1960), he indirectly attributed a central role to human capital by mainly highlighting that its tacit components are decisive factors for contributing “*to the success of actions*” (1960, p. 24). Indeed, von Hayek stated:

Our habits and skills, our emotional attitudes, our tools, and our institutions are as much as indispensable foundation of successful action as is our conscious knowledge ... even the successful employment of our intellect itself rests on their constant use. (1960, p. 26)

von Hayek recognised the impossibility of accumulating all propositional knowledge necessary for doing something (Popper, 1959). All information cannot be completely articulated (scientific knowledge) because it is not totally codifiable for the unavoidable presence of *tacit elements* (Kanheman, Tverski, 2000). In any case, man's brain cannot contain all information due to its *physical constrains*. On the other hand, von Hayek argued that good human capital consists of an individual's capacity for *efficiently making use* of his localized available knowledge. In this view, von Hayek described the expert's human capital as the "*knowledge of where and how to find the needed information*" (1960, p. 25) because what makes someone an expert is not substantive and scientific knowledge, but the practical knowledge of how to use the right kind of information skilfully.

On the other hand, in 1967's *Rules, Perception and Intelligibility*, von Hayek sustained that the human acts are intentional, but their outcomes are unpredictable. In any process many material and immaterial factors, as well as rational and irrational ones, occurs (Egidi, 2004). These determinants interact among them, sometimes correlatively and sometimes chaotically (Augier, Kreiner, 2000). Therefore, the attempt to mathematically formalise the dynamics of these factors and their combinations is absolutely *utopian*. In this regard, Hayek wrote:

Among the determinants there must always be some rules which cannot be stated or even be conscious. At least all we can talk about and probably all we can consciously think about presupposes the existence of a framework which determines its meaning, i.e. a system of rules which operate us but which we can neither state nor form an image of and which we can merely evoke in others in so far as they already possess them. (1967a, p. 62)

In fact, von Hayek set forth that

we are not in fact able to state all the rules which govern our perceptions and actions ... we always know not only more than we can deliberately state but also more than we can be aware of ... and that much that we successfully do depends on presuppositions which are outside the range of what we can either state or reflect upon. (1967a, p. 60-61)

In this perspective, the tacit dimension of human capital concerns a certain realm of phenomena that one knows how to deal with, but does not know what this realm is exactly (Weisberg, 1980). In the case of skills, Hayek explained (1967b) that we may not be able to state explicitly how we act. For example, a child speaks his native language fluently without any apparent knowledge of its grammar. He can even correct grammatical errors. By referring to this consideration in *Law, Legislation, and Liberty* (1973), von Hayek pointed out the connection between human capital and social capital. In fact, social coordination can become possible if people learn the *inarticulate rules* of living together, that which we can also call ‘civic virtues’. In fact, an individual endowed with human capital including no codified social rules can more easily comprehend others’ actions and also learn to follow formal rules (Egidi, 2006). For Hayek (1978), having an unconscious understanding of these implicit rules allows people to see intuitively or instinctually regarding an irregular act (Denzau, North, 1994).

5. Conclusions

We can summarize the approach to human capital of the principal exponents of Austrian marginalism school using two lines of thought. The former is oriented according to a *macroeconomic* perspective that connects the features of every individual's human capital with the identification of the better *economic system* for the improvement of society's well-being. von Mises (1922), Schumpeter (1942) and von Hayek (1948a; 1960; 1973) highlighted the original aspects of individuals' human capital by proving the expediency of capitalism *versus* socialism. To this end, they explained that the actions of individuals are intentional, but their outcomes are unpredictable; the information and knowledge regarding economic transactions is always partial and disseminated among economic operators and thus cannot be grouped by a central planner; the trends of goods prices spontaneously tend to equilibrium and states must consequently not interfere in market dynamics; and the growth of human capital is due to the learning of inarticulate rules of how society works and to the incentives for creating new opportunities of business development in a logic of competition.

On the other hand, we can identify in the contribution of scholars of Austrian marginalism school a *microeconomic* perspective that examines the psychological characteristics of the human capital of the individuals *in action*. von Mises (1949) introduced the method of praxeology for understanding the motivations that shape economic behaviours. He argued that every individual always operates because he wants to *improve* his state of affairs and that human actions are rational, purposeful and selfish. On the contrary, von Hayek (1952) thought that human capital contained *irrational* factors, such as emotions, sentiments, mental frames and mistakes of comprehension, on one side, and *tacit* elements, such as the capacity to get along with people, care for things and look at news on the other. In fact, the Schumpeterian entrepreneur (1911) is capable of creating innovation opportunities where the others cannot see it.

In conclusion, we praise the arguments of the Austrian marginalist economists concerning the impossibility of articulating the contents of human capital and for their introduction of the paradigm of analysing the 'acting individual'. We believe that von Mises, von Hayek and Schumpeter argued against any mechanical attempt of macroeconomic constructivism and microeconomic mathematical modelling because of, as they clearly explained, the *unpredictable complexity* of interacting processes in making decisions for the whole society and single individuals. Nevertheless, we must note that these scholars did not recognise the *social nature* of human beings. Evidence demonstrates that every man likes to develop relationships of reciprocity, cooperation, fraternity and gift-giving in the context of a free society. These types of relationships are mainly present within the lively dynamism of *intermediate bodies*. Second, we think that the ethical neutrality of the methodological individualism of von Mises, Schumpeter and von Hayek supposes a conception of economics as a descriptive social science, such as the English classical school and the English marginalist one. On contrary, we are in favour of the idea of economics as being ethically oriented in the awareness that is necessary to act in conformity to natural morality in order to direct the economy to the service of humankind.

Chapter 3

Human Capital in the Chicago Marginalist School:

The Mainstream Theory

1. Introduction

Friederick von Wieser¹³¹ explored Menger's theory of diminishing marginal utility and elaborated the notion of opportunity-cost by introducing the consideration of the missed benefits of alternative possible choices in the costs-benefits analysis. For example, education generates some direct benefits, needs the sustainment of some costs (books, fees, etc.), and implies the giving up of those wages that would be received if one had worked. Von Wieser's marginalist pattern was adopted by the Chicago marginalist scholars who formulated a new approach taken from the *rational choice* of investing in human capital (Blaug, 1976). Instead of focusing on the state's aim of enhancing the wealth and power of the nation, the new approach sought to determine the reasons why an individual would decide to invest in his skills. They thus adopted a *microeconomic* view and used the instrument of marginal utility and the paradigm of "homo economicus". The exponents of the Chicago marginalist school always supported their researches with extensive appendixes of *empirical data* based on the supposition of the epistemology of *neutrality* of economic science (Robbins, 1932, p. 15) and on Milton Freedman's demonstration (1953) that free competition generates the best Paretian efficiency. In the opinion of Piergiorgio Lovaglio and Giorgio Vittadini, the scholars of the Chicago school were capable of providing some economic analytical instruments for examining the topic of human capital. This introduced a specific field of research in literature called "economics of education". In particular, Chicago economists

¹³¹ Friedrich von Wieser (1851-1926)

*principally pointed out that the variables of the years of education and of the professional experience acquired in the workplace (on-the-job-training) are the decisive factors which explain the functions of wages of workers*¹³² (Lovaglio, Vittadini, 2004, p. 55).

For Chicago scholars investments can be made both by individuals (or their families) and by firms (Glomm, Ravikumar, 1992). Firms can sustain the costs of training and on-the-job learning if and only if they can reasonably presume that the training will remain within the organization if it is sufficiently specific, otherwise the costs of training and education will be sustained by the individual or his family (Blundell, Dearden, Meghir, Sianesi, 1999). As a consequence, the distinction between *general* and *specific* training and education is of great importance in the Chicago marginalist school's analysis. The effects of higher education appear in the *earnings differential* of individuals assuming the equality of other things. The effects of the value of the on-the-job training appear partly in the individual's increase of earnings and partly in the firm's better economic results (Weiss, 1995; Black, Lynch, 1996). Nevertheless, the Chicago marginalist school was not interested in measuring the value of aggregate stock of human capital (macroeconomic perspective) and its distribution within a population.

¹³² The Italian original quotation is “*si sono soffermati principalmente su variabili quali gli anni di educazione, l'esperienza professionale sul luogo di lavoro (on-the-job-training), come i fattori decisivi che spiegano le funzioni di guadagno per i lavoratori.*”

2. Human Capital in the Literature of the “Residual of Ignorance”

In the beginning, the Chicago marginalist scholars gave attention to human capital in light of the 1957 original work of Robert Solow¹³³, an important economist of New York University. Solow discovered the emergence of a ‘residual’ of GDP not imputable to the traditional determinants of economic growth and which he identified as *technological progress* (Griliches, 1959, p. 6). Later, Solow studied technological progress in an autonomous way with respect to the other factors of production and conceived it as an element of an aggregate production function, anchored only to the *time variable*. In the Solowian view, technological progress constitutes a residue and does not influence other factors in producing wealth; at the same time, it explains the variations of GDP that are not due to traditional determinants. Solow later (in 1959) included technology as an *endogenous element* of the definition of the capital factor. He thought that technology should be incorporated into recently produced capital goods, before being able to show a growth effect on the output. Finally, Solow defined (in 1962) technology as an *exogenous factor* that affects the composition of the capital factor. However, as Alessandro Page noted (1974, p. 66-67), the Solowian approach has the unworthiness of not incorporating technical progress into the labour factor and of not keeping in mind, consequently, that education is a variable that influences the improvement and the productivity of labour.

On the other hand, in the same period, Odd Aukrast¹³⁴, a professor at Oslo University, elaborated a model of production function in 1959 *à la Cobb-Douglas* aimed at explaining the trends of growth in the Norwegian GPD. He discovered that the growth of GDP is significantly correlated to workers’ human capital. This human capital handles the technical organisation of firms and increases their productivity.

¹³³ Robert Solow (1924-)

¹³⁴ Odd Aukrast (1915-2008)

Finally, we mention Edward Denison¹³⁵, the only exponent of the Chicago school who, in 1962, tried to explain the Solowian ‘residual’ while the other Chicago scholars were concentrated on microeconomic elaborations. Denison identified the residual with *knowledge*. He estimated the contribution of knowledge to economic growth by excluding the pieces of GDP attributable to common “*measurable inputs*” (Bowen, 1964, p. 181). In Denison’s view, education and training generate not only product and process improvements relative to capital (Solow’s technology), but also some individual capabilities and skills that affect labour productivity (Psacharopoulos, 1972). Second, in his 1967 statistical book *Why Growth Rates Differ: Postwar Experience in Nine Western Countries*, Denison developed the ideas first posed by Simon Kuznets¹³⁶ (1946), Moses Abramovitz¹³⁷ (1956) and Solomon Fabricant¹³⁸ (1959) for proving the interdependent relationship between the growth of technology and knowledge with that of human capital. For Denison, human capital has to be taken into account concerning

the changes in labour input, subdivided among changes in employment, in hours of work, in the age-sex composition of total man-hours worked, and in education. (1967, p. 9)

3. Human Capital in Mincer

Jacob Mincer’s¹³⁹ *Investment in Human Capital and Personal Income Distribution* (1958) was the first of a long and important series of contributions published in the *Journal of Political Economy* in the 1960s. In fact, in 1962 this review published a specific addendum concerning human capital. However, Mincer proposed a

¹³⁵ Edward Denison (1927-2004)

¹³⁶ Simon Smith Kuznets (1901-1985)

¹³⁷ Moses Abramovitz (1912-)

¹³⁸ Solomon Fabricant (1906-1989)

¹³⁹ Jacob Mincer (1922-2006)

“*pioneering work*” (Becker, 1962. p. 47, note 86) that tried to formalize the relationship between the level of a worker’s education and training and that of his or her wage. In the Mincerian model, the workers’ wages (W) are assumed as *constant* over time (t) and, thus, perfectly actualisable at the same rate of discount (r) as well as the individuals’ endowments are considered identical. In this picture, as the investment (I) in workers’ education and training presents an increasing trend at the rate of interest (r) –one that coincides with the rate of discount of wages–, the difference in wages (Δ_W) is proportional to the resources used for the growth of human capital. In analytical terms, the difference between workers’ wages depends exclusively on their investment in human capital:

Formula n° 3: Mincer’s (1958) Differential Wages Equation/1

$$\Delta_W = W_t - W_{t-1} = r I$$

Because

$$I_1 = W_0$$

$$I_2 = W_1 = W_0 (1 + r)$$

$$I_3 = W_2 = W_1 (1 + r) = W_0 (1 + r)^2$$

Mincer pointed out that the distribution of an investment’s trend is represented by a *normal* and *symmetric curve*. Second, he proved that the difference between educated workers’ wages (W_e) and uneducated ones (W_{ne}) is related to the number

of years of education (t) for the rate of return (r) of investment in human capital. This conclusion was formalized with the expression:

Formula n° 4: Mincer's (1958) Differential Wages Equation/2

$$\ln W_e = \ln W_{ne} + t r$$

Nevertheless, Mincerian patterns are based on a completely hypothetical scenario (Teixeira, 2007). Mincer assumed the same ability of the employees, the constancy of their income and the applicability of an identical discount rate on wages (Blinder, 1976). He recognized the approximation of his thinking in a later publication, in 1974, where he updated his thesis in light of the development of Schultz's and Becker's economic literature. Here, Mincer stated:

It is equally correct to say that the distribution of earnings is determined by the distribution of accumulated human capital and of rates of return of human capital investment or that the distribution of earnings is determined by the distribution of ability and opportunity. Or, putting it in a casual hierarchy, the distribution of accumulated human capital is a proximate determinant of the distribution of earnings ... In turn, ability and opportunity determine the distribution of human capital. (1974. p. 138)

As a consequence, Mincer built a new model by assuming that potential earnings in any time period depend on the investments made in previous periods. Investments in training (I) are a fraction (x) of potential earnings invested at time t (E_t).

Formula n° 5: Mincer's (1974) Differential Wages Equation/1

$$I_t = x_t E_t$$

Finally, Mincer added the variable of the rate of return in training investment (r) made in time t . His formula can be written as

Formula n° 6: Mincer's (1974) Differential Wages Equation/2

$$E_{t+1} = E_t + I_t r_t = E_t (1 + x_t r_t)$$

4. Human Capital in Schultz

The notion of 'human capital' was introduced as a theory by Theodore Schultz¹⁴⁰ at the inaugural lecture of his term as President of the American Economic Association (Schultz, 1960). According to Schultz, it was necessary to consider

¹⁴⁰ Theodore William Schultz (1902-1988)

investment in education and training as *any other* kind of investment. In a 1961 paper, he also affirmed that “*much of what we call consumption constitutes investment in human capital*” (1961a, p. 1). In fact, in order to achieve the best opportunities for work, we use educational resources (e.g., school and university enrolment fees, the cost of books, subscriptions to public transport, etc.); similarly, we execute certain expenditures to maintain good health (e.g., medicine, sport courses, medical examinations, etc.) or when moving to more favourable places (e.g., cost of the move, rent, etc.). Moreover, we also need to consider the implicit *opportunity cost* of decisions related to human capital, for example, income not earned during the learning period (Kiker, 1971).

In contrast to Schultz, Harry Shaffer¹⁴¹ radically opposed the introduction of a conceptual identity between consumer expenditures and the cost of investment in human capital. In his view, “*what constitutes “capital” and what constitutes “investment” is matter of definition*” (1961, p. 1037). Otherwise, even the most absurd outlays would be regarded as investments (e.g., the purchase of a particular toothbrush to achieve a radiant smile or a pack of cigarettes to keep calm in difficult situations). Moreover, even if national wealth increases with the growth in human capital, it would not be possible to measure the relationship concretely. In fact, economic development is affected by ethical and cultural contexts, environmental circumstances and the individual characteristics of economic agents, a point later admitted by Schultz (1961b; 1963). Finally, Richard Eckaus¹⁴² (1962) observed that only a part of human capital is used in the production process, while John Vaizey¹⁴³ criticized (1972, p. 34) the missing role of public policies.

However, in 1971, Schultz improved his view from both the analytical and conceptual perspectives, taking into consideration comments put forth by Shaffer, Eckaus and Vaizey, as well as the development of literature from Becker (1964) and Denison (1967) in terms of statistical data. He argued that, in a Post-Fordism

¹⁴¹ Harry Shaffer (1919-2009)

¹⁴² Richard Eckaus (1926-)

¹⁴³ John Ernest Vaizey (1929-1984)

age, man is a privileged source of wealth because the specific abilities and competencies of an individual worker allow for the realization of a *competitive advantage* for the firm. From a microeconomic point of view, the author pointed out that

the distinctive mark of human capital is that it is a part of man. It is "human" because it is embodied in man, and it is "capital" because it is a source of future satisfactions, or of future earnings, or of both. Where men are free agents, human capital is not a negotiable asset in the sense that it can be sold. It can, of course, be acquired not as an asset that is purchased in a market but by means of investing in oneself. It follows that no person can separate himself from the human capital he possesses. He must always accompany his human capital whether it serves him in production or in consumption. (1971, p. 48-49)

On the other hand, from a macroeconomic perspective, human capital constitutes a favourable factor for national well-being because it helps to increase the gross domestic product. Therefore, the state has to support the rise of the average level of education through subsidies and scholarships, as well as companies' activities of manpower qualification by forms of tax relief (Schultz, 1971, p. 80-85).

5. Human Capital in Becker

As noted above, Schultz's conclusions are founded¹⁴⁴ on the results of a work by Gary Becker¹⁴⁵ (1962), who, in turn, expanded upon Jacob Mincer's 1958 contribution. Becker took inspiration from that paper for his first article on the argument in 1962, which was included two years later in his famous volume *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. The text, which represents the point of departure of a series of his publications¹⁴⁶, was expanded and revised in a second edition in 1980 and in a third in 1993.

In this treatise, Becker compared man to a *machine* able to add value to the production process. Education and training are considered two opportunities of investment. In this way, future wages can be actualized and compared to the sum of both real and figurative costs supported by the individual to obtain the *output rate* of human capital. Melvin Reder¹⁴⁷ criticised this approach:

The argument is conducted entirely from the viewpoint of an individual investor, i.e., prices are taken as parameters. By this restriction of the scope of the inquiry, the author avoids such thorny questions as how to measure changes in a capital stock and in its rate of return when relative prices change. (1967, p. 98)

¹⁴⁴ "To cope analytically with investment in people, Becker's formulation becomes a rich source of hypothesis." (Schultz, 1963, p. 65)

¹⁴⁵ Gary Becker (1930-). The Sveriges Riskbank Prize in Economic Sciences in Memory of Alfred Nobeli was awarded to Gary S. Becker in 1992 "for having extended the domain of microeconomic analysis to a wide range of human behaviour and interaction, including nonmarket behaviour."

¹⁴⁶ (Becker, 1967; 1976; 1985; Becker & Tomes, 1986; Becker, Murphy & Tamura, 1990).

¹⁴⁷ Melvin Washington Reder (1919-)

On the other hand, Becker made recourse to some simplifications to analytically express the attempt of individuals to figure out the outcome of their choices, taking into consideration their bounded rationality¹⁴⁸, the flow of real and virtual money¹⁴⁹, possible opportunities and the inevitable flow of time¹⁵⁰. Moreover, the author postulated the existence of a perfectly competitive market allowing the maximisation of profit. The hypothesised scenario determines a *general economic equilibrium* (Vaizey, 1972) in which it is possible to aggregate physical capital measured by its historical cost with human capital evaluated in relation to wage level. At time (t), the marginal product of the firm ($P't$) coincides with the employees' wage level (Wt):

Formula n° 7: Becker's (1964) Marginal Product Equation/1

$$P'_t = W_t$$

The introduction of training (F) modifies the equation that, nevertheless, remains invariant if considered at zero time. Therefore, it is possible to work out an operation of actualization using a hypothetical discount rate (i) to obtain:

¹⁴⁸ Becker (1964, p. 31-33, 56-58)

¹⁴⁹ Becker (1964, p. 55-56)

¹⁵⁰ Becker (1964, p. 49-52)

Formula n° 8: Becker's (1964) Marginal Product Equation/2

$$P'_0 + \sum_{t=1}^{n-1} \frac{P'_t}{(1+i)^t} = W_0 + F + \sum_{t=1}^{n-1} \frac{W_t}{(1+i)^t}$$

Defining the present value of a firm's future receipts less expenses as:

Formula n° 9: Becker's (1964) Equation of Present Value of a Firm's Profit

$$G = \sum_{t=1}^{n-1} \frac{P'_t - W_t}{(1+i)^t}$$

The precedent expression can be written as:

Formula n° 10: Becker's (1964) Marginal Product Equation/3

$$P'_0 + G = W_0 + F$$

At this point, G constitutes the *reward* of the investment in F of the first period. However, this is a simplified result because even the *indirect* costs must be

examined: a low performance of the apprentice corresponds with intentional and involuntary interruptions during the training stage and the partial use of raw materials. Defining the total cost K , the above equation can be improved as follows:

Formula n° 11: Becker's (1964) Marginal Product Equation/4

$$P_0^n + G = W_0 + K$$

Where P_0^n is the potential marginal product at zero time due to the reverberation of indirect costs ($P_0^{in} - P_0' = K - F$). In this way, it is possible to conclude that G is equal to K . In other words, in contrast from Pigou's assumptions, Becker demonstrated that, first, in the worst hypothesis, education and training expenditures are *at least* wholly recuperated during an employee's working life. Second, the author retains the fundamental nature of a distinction between general¹⁵¹ and specific¹⁵² training. The former, which is carried out in every firm, constitutes a specific tool of negotiation in the labour market to the advantage of the employee so he can benefit from the acquisition of these *minimal operative competencies* in any other production activity. From that, Becker deduces that each firm prefers to recruit those who already possess basic working abilities. Otherwise, a firm is only willing to directly train an individual if the cost of doing so is supported by the employee himself through the reduction of his wage under P'_t . On the other hand, *specific training*, which obviously takes place after the fulfilment of general training, represents an investment for the firm itself because the worker cannot sell his experience outside that specific sector or workplace. Still, in that sector, he can easily find employment with a wage equal to P'_t . Therefore, in order

¹⁵¹ Becker (1964, p. 11-17)

to prevent a high labour turnover, which implies continuous training costs, a firm is willing to pay the employee at least what the competitors would be willing to pay.

Concerning education¹⁵³, Becker suggested, in conformity to his methodology, a consideration of both monetary and figurative costs. The former includes transport, books, fees and so forth. The latter are given by the sum of non-earned wages during the education period. In fact, Becker argued:

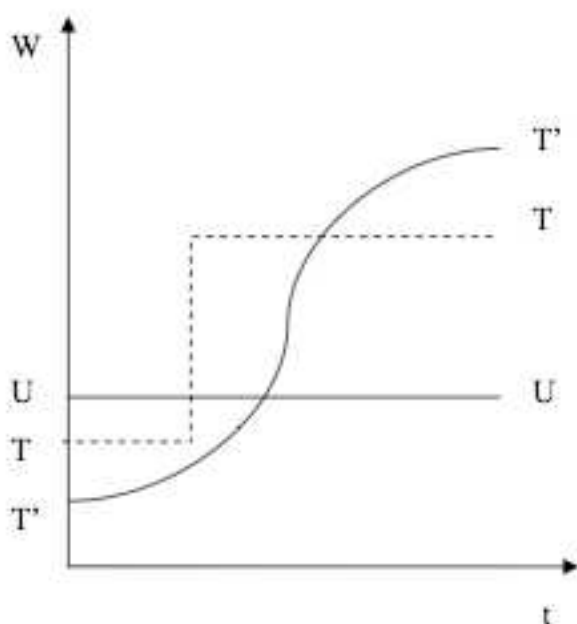
A sharp distinction between schools and firms is not always necessary: for some purposes schools can be treated as a special kind of trainee.... Regardless of whether all costs or merely indirect costs are subtracted from potential earnings, schooling would have the same kind of implications as general on-the-job training. Thus, schooling would steepen the age-earnings profile. (1964, p. 31)

Becker's model let the beginning of the employee's working lifetime (t) coincide with his entry into the labour market. The employee with minimal training receives a constant wage (W) during his life (UU), while those with middle-level training would get an increasing wage (TT) and those who received high-level training achieve a more rapidly rising wage (T'T'). The intercept of these curves is lower when the individual invests in his own human capital because of the opportunity cost of non-earned wages during the training period.

¹⁵² Becker (1964, p. 18-28)

¹⁵³ Becker (1964, p. 29-30)

Figure n° 2 - The Trend of Individual Wages in the Working Lifetime based on Stock of Training (Becker, 1964, p. 15).



In conclusion, Becker's entire theoretical framework is founded on the ethical neutrality of economic science as outlined by Robbins (1932)¹⁵⁴: the scholar has to investigate the formation process of economic decisions taking no interest in individuals' ends (Becker, 1992). In fact, in his Nobel Prize lecture, Becker summarised his approach to economics by affirming:

I have tried to pry economists away from narrow assumptions about self interest. Behaviour is driven by a much richer set of values and preferences. The analysis assumes that individuals maximize welfare "as they conceive it", whether they be selfish,

¹⁵⁴ "Economics is the science which studies human behavior as a relationship between given ends and scarce means which have alternative use." (Robbins, 1932, p. 15)

altruistic, loyal, spiteful, or masochistic. Their behaviour is forward-looking.

6. Human Capital in Arrow

Kenneth Arrow¹⁵⁵ was an expert on economic general equilibrium, endogenous growth and asymmetric information. However, he highlighted one decisive aspect of human capital in his *Social Choice and Individual Values* (1951). Here, he developed, like the other Chicago scholars, an accordingly analytical and quantitative modality: the process of making decisions in a democratic system. Arrow assumed the Paretian principle of efficiency and used the methodological postulates of preferences' comparability¹⁵⁶, transitivity¹⁵⁷, the impossibility of no choosing¹⁵⁸ and the independency of irrelevant alternatives¹⁵⁹. Second, he defined a social action as the sum of individual actions but specified that, as von Hayek understood, the reverse is not true. In fact, a social action cannot ever be divided into individual behaviours, just as the responsibility of one or more precise actors cannot be attributed for some of its parts. For Arrow, a social action is necessarily connected to the cultural, geographical and temporal contingent context where it is taken (social capital) and to the unpredictable practical combination of individuals' human capital (intended as set of values, ideals and moral convictions). Finally, Arrow demonstrated mathematically the *impossibility* of forming an ordering of social choices in a consensual way. In fact, he affirmed:

¹⁵⁵ Kenneth Arrow (1921 -)

¹⁵⁶ Comparability is the condition according to which an individual chooses between two options or whether both options are indifferent to him.

¹⁵⁷ Transitivity supposes the existence of a hierarchical logic in ordering choices. If choice A) is preferred by the individual to choice B), and choice B) to choice C), we can gather that choice A) is preferred to choice C) without the necessity of a specific comparison.

¹⁵⁸ The 'impossibility of no choosing' refers to the absence of the right to no voting, but the permission of voting nothing (white form).

¹⁵⁹ Independency of irrelevant alternatives indicates the necessity of choosing only among alternatives presented by excluding those temporarily not available.

If we exclude the possibility of interpersonal comparisons of utility, then the only methods of passing from individual taste to social preferences which will be satisfactory and which will be defined for a wide range of sets of individual orderings are either imposed or dictatorial. (1963², p. 59)

In other words, the collective-choice procedures reflect problems of aggregation at two levels –the intrapersonal and the interpersonal. Internal conflicts depend from the many cultural, psychological, ethical and moral elements of every individual’s human capital. They affect an individual’s determination of the relationship between his preferences and the overall evaluations. On the other hand, intrapersonal conflicts are provoked by the interaction of individuals. Every human subject has a different set of values (related to his human capital) that he wants to apply in social choices, but the practical combination of these individual sets of values always generates a conflict. For this reason, Gregory Kavka¹⁶⁰ argued that, in social choices, “*we may see an image of what people really value, but only through two glasses darkly*” (1991, p. 164).

Finally, Arrow outlined the need for promoting people’s education so as to create a political system (democracy) that work efficiently. He believed that human capital is constitutively connected to social capital because personal values are principally shaped in the human community where one grows up. The point was, in Arrow’s opinion, supporting an individual’s *desire for relationships* (to belong to groups). It is only in this way that we may expect social welfare judgments to be made when “*there is both a widespread agreement on the decision process and a widespread agreement on the desirability of everyday decisions*” (Arrow, 1963², p. 61). A good human relationship represents the only possible alternative to dictatorship for ordering social choices. Arrow stated:

¹⁶⁰ Gregory Kavka (1947-1984)

This does not deny the possibility of a limited use of the market as an instrument for achieving certain parts of the social optimum, especially if it is deliberately manipulated to make behaviour under pragmatic imperatives coincide with that which would exist under moral ones. (1963², p. 86)

In conclusion, Arrow advanced claims for a relevant role of human capital in the determination of social and political choices. He implicitly conceived ethics as the series of people's moral values that can orient their economic and political activity toward the attainment of good human development in society.

7. Human Capital in the Theory of Endogenous Growth

The Beckerian theory of human capital was developed by Hirofumi Uzawa¹⁶¹ (1966) in a model of development grounded on *endogenous* factors (Cazzavillan, Musu, 1997). Uzawa distinguished between productive labour and education/training labour, which respectively directly and indirectly affect the function of production. In fact, Uzawa thought that education/training labour increases the Solowian rate of technical progress and, therefore, the productivity of an entire economic system. Richard Nelson¹⁶² and Edmund Phelps¹⁶³ supported (1966) this view and saw the fundamental role of individuals as rational “decoders” and efficient “transmitters” of information in a society characterized by diffusion of knowledge. They stated:

¹⁶¹ Hirofumi Uzawa (1928-)

¹⁶² Richard Nelson (1930-)

¹⁶³ Edmund Phelps (1933-)

Education enhances one's ability to receive, decode, and understand information, and that information processing and interpretation is important for performing or learning to perform many jobs. (Nelson, Phelps, 1966, p. 69)

On the other hand, Robert Lucas (1988) viewed the relationship between human capital and endogenous growth as an attempt to reformulate macroeconomic analysis. This effort was aimed, in Giuseppe Di Taranto's opinion, at contrasting the "*Keynesian patterns in the method as well as in the content*"¹⁶⁴ (2008b, p. 32). In fact, in the 1970s, Lucas's New Chicago school of thought, called the "New Classical Macroeconomics School" or "School of Neo-Monetarism", promoted an innovative market economy grounded in aggregated microeconomic models. Lucas substituted the rational expectations of economic operators with the *adaptive* ones and proved that a nation's economic growth is largely due to *endogenous* elements of its economic system (i.e., research and development).

8. Conclusions

The Chicago marginalist school is universally recognized for its historical merit for having introduced important analytical instruments for studying human capital (Quadrio Curzio, 1973). These scholars adopted a *microeconomic* point of view, formulated mathematical equations and elaborated statistical data for demonstrating the worthiness of their theories (Mincer, 1958). They promoted a view of human capital related to the paradigm of "homo economicus" that supposed that individuals have full information concerning the costs and benefits of their alternatives of choice and which they process according to an *unlimited rationality* in behaviour for attaining the maximum possible utility (Schultz, 1961a; Becker, 1992). This view deals with contributions that

¹⁶⁴ The Italian original quotation is "*contrapponendosi, metodologicamente e contenutisticamente, agli schemi keynesiani.*"

developed from Solow's seminal 1957 article concerning the existence of a "residual" of economic growth that cannot be explained by the traditional factors of GDP. While Solow attributed this residual to the increase of technology, Aukrust (1959) referred to an organization's efficiency, and Denison (1962) connected it to knowledge. In this context, Schultz (1960) pointed to the concept of "human capital" as a stock of immaterial resources *incorporated* in every individual and argued that human capital can be treated like *any other* type of investment. As a consequence, Becker (1962) theoretically sustained and then proved in 1964 with a set of empirical data, the existence of a positive *correlation* between the number of years of education and training of an individual and the amount of his wage. Second, Becker (1964) also demonstrated the expediency for the individual to acquire *general training* in order to be seen as desirable in the labour market and the expediency for firms to encourage their workers to *specialize* in order to improve their performance.

Of course, the publication of the contributions of the Chicago marginalist school has represented a great step in establishing the topic of human capital in mainstream economics. Nevertheless, in our opinion, this approach constitutes a sophisticated manipulation of real human action because, in daily life, human beings make choices under the influence of many psychological, emotional, ethical and moral factors that are neither articulable nor calculable. As von Mises (1949) sustained, human action is the result of a complex set of determinants that we can only *backwards* identify. Moreover, the Chicago scholars neglect that human beings almost always belong to *intermediate bodies* wherein they increase their human capital. Here, men often relate reciprocally with solidarity, act with altruism, experience affections, develop friendships and offer some of their properties generously to others. Therefore, in our view, the idea of man as a selfish being, totally cold in his decisions and exclusively interested in maximising his utility appears to be a product of the laboratory rather than a description of common people in action.

On the other hand, the Beckerian microeconomic approach is the basis of the Arrowian (1951; 1963) democracy paradox, where society is viewed as the *sum of individuals* and not as an organic body constituted by single persons but endowed with

its own subjectivity. In addition, the microeconomic approach shapes the framework of the school of endogenous growth (Uzawa, 1966; Nelson, Phelps, 1966) where only in 1988 Lucas set forth the worthiness of adaptive expectations of individuals over rational ones.

Chapter 4

Human Capital in the Alternative Approaches to the Marginalist Schools:

Some Interesting Insights

1. Introduction

As we have just seen, the marginalist movement radically changed the modalities of economic analysis and the purposes of economic studies. The marginalist approach and the paradigm of “homo economicus” became the pillars of the mainstream in both literature and didactics. Concerning the topic of human capital, the majority of scholars totally accepted the presuppositions, methods and goals of the Chicago marginalist school. In fact, much recent literature tries to confirm Beckerian assertions by enriching them with new sets of statistical data.

However, in the history of economic thought there have been some significant alternative approaches to marginalism, even regarding human capital. Perhaps the most important alternative academic groups that have examined the topic of human capital were the German ethical school, the school of Organisation for Economic Co-Operation and Development, the school of capabilities, and the Catholic social thought.

2. Human Capital in the German Ethical School

The German ethical school operated from the middle of the 19th century until the First World War and was aimed at identifying the best political instruments for improving the well-being of society from a macroeconomic perspective. Friedrich List¹⁶⁵, Wilhelm Roscher¹⁶⁶, Bruno Hildebrand¹⁶⁷ and Karl Knies¹⁶⁸ (first

¹⁶⁵ Friedrich List (1789-1846)

generation) and Gustav von Schmoller¹⁶⁹, Adolph Wagner¹⁷⁰ and Lujo Brentano¹⁷¹ (second generation) were united by an *interdisciplinary* approach to economic matters, a strong rejection of the existence of abstract economic laws regardless of *historical* facts and an *inductive* method of analysis based on statistics and economic history.¹⁷² They criticised the Smithian and marginalist theories based on the paradigm of “homo economicus” because they argued that the private interests of individuals do not always coincide with the collective interests of nations. Second, they viewed the *state* as an independent economic subject whose function is not exclusively to define market rules and to correct the failures of the competition system, but rather *actively* to support the autonomous activity of the market by taking into account the standard of living of the poor (Zamagni, 1991). As a consequence, the German ethical economists promoted a *paternalistic* role of the state in the education market and in training programmes. They stated that acquired abilities are partly an inheritance of past labour and self-restraint and are the most important part of a nation’s stock of capital. Finally, they highlighted the *cultural* and *spiritual* aspects of human capital in an *organic* perspective of society. However, the defeat of Germany in the two World Wars provoked several cultural consequences; for example, the communitarian proposal of the German ethical school was substituted by the Anglo-Saxon individualistic mainstream in literature (Baranzini, Marangoni, Solari, 2008², p. 385).

Finally, we can add that, despite the fact that the German Ordo-Liberalist economic school promoted a view in opposition to the German ethical one, the

¹⁶⁶ Wilhel Roscher (1817-1894)

¹⁶⁷ Bruno Hildebrand (1812-1878)

¹⁶⁸ Karl Knies (1821-1898)

¹⁶⁹ Gustav von Schmoller (1838-1917)

¹⁷⁰ Adolph Wagner (1835-1917)

¹⁷¹ Lujo Brentano (1844-1931)

¹⁷² The dispute between Menger and von Schmoller concerning the method of economic analysis was really heated. The former argued for the existence of universal economic laws based on the principle of marginal utility and general economic equilibrium, while the latter was concerned with the inextricable link between economy and history. Consequently, Menger emphasised the role of markets as a ‘natural’ place for achieving the optimal efficiency of trades that maximises the well-being in society. von Schmoller viewed the market as an instrument that makes sense only within a political-institutional pattern of explicit and tacit social rules (Gioia, Schefold, Zagari, 1993).

former maintained some aspects of the latter in terms of its analysis of economic systems. In fact, Walter Eucken¹⁷³, Ludwig Erhard¹⁷⁴ and Wilhelm Röpke¹⁷⁵ elaborated on the innovative theory of a ‘social market economy’ grounded, on one side, in defence of *moderate free competition* and, on the other, in the valorisation of human capital intended as spiritual richness deriving from good human relations within the *intermediate bodies* to which humans belong (Felice, 2009).

3. Human Capital in the Heterodox Schools of Measurement

Besides the attempt of the Chicago marginalist school, and of Becker in particular, we can find other famous economists who have tried quantitatively to estimate the value of human capital in the history of economic thought. Nevertheless, these authors are considered heterodox because their approaches are not identical with that of Becker, (i.e., their approaches are not grounded in the hypothesis of perfect rational choices of individuals, firms and nations). We can divide these alternative attempts into two categories according to the retrospective or prospective method of the mathematical formalization of human capital.

3.1 Human Capital in the School of the Retrospective Method

The retrospective method of analysis is a *cost-based approach* because it points out the cost of raising a human being. The basic assumption is that the value of human capital embodied in an individual is equal to the cost of producing that same “wealth”. Ernst Engel¹⁷⁶ (1883) introduced this approach in an approximate macroeconomic estimate of German immaterial human richness as the sum of microeconomic values concerning the human capital of German citizens. He divided the German population into three classes:

¹⁷³ Walter Eucken (1891-1950)

¹⁷⁴ Ludwig Erhard (1897-1977)

¹⁷⁵ Wilhelm Röpke (1899-1996)

¹⁷⁶ Ernst Engel (1821-1896)

the lower ($p = 1$), the middle ($p = 2$) and the upper ($p = 3$). Then, he estimated that the cost at birth (c_0) of each class was respectively 100, 200, and 300 marks and increased at a simple arithmetic progression (i) of 10% annually. Finally, Engel assumed that human capital is formed when a man is 26 years old and a woman is 20 years old. Hence, at age (a), the monetary value of a human being belonging to the p th social classes is:

Formula n° 12: Engel's (1883) Retrospective Method of Human Capital Measurement

$$C_{a,1} = c_0 \left[1 + a + i \frac{a(a+1)}{2} \right]$$

$$p = 1, 2, 3$$

$$a \leq 26 \text{ for men and } a \leq 20 \text{ for woman}$$

Engel's actuarial model has been useful for estimating the *nation's costs* of rearing a human being –omitting the social costs of education, health care, sanitation and the social costs of those who do not survive (Lye, Hirschberg, 2010). However, Engel's approach was expanded upon by Vilfredo Pareto¹⁷⁷ (1905), Alberto Beneduce¹⁷⁸ (1904) and Corrado Gini¹⁷⁹ (1931). Then, Louis Dublin¹⁸⁰ and Alfred Lotka¹⁸¹ (1930) integrated Engel's simple model for estimating the *wealth* of a nation connected to its human assets. They thus considered the individual's probability of surviving (π_t) at age

¹⁷⁷ Vilfredo Pareto (1848-1923)

¹⁷⁸ Alberto Beneduce (1877-1944)

¹⁷⁹ Corrado Gini (1884-1965)

¹⁸⁰ Louis Dublin (1882-1969)

¹⁸¹ Alfred Lotka (1880-1949)

t, the interest rate (i), the per capita cost of living (c_t) from age t to age t+1, the earnings of the individual (y_t) from age t to age t+1 and the proportion of individuals employed (E_t) from age t to age t+1. Hence, for Dublin and Lotka, the cost of rearing an individual to age (a) is:

Formula n° 13: Dublin’s and Lotka’s (1930) Retrospective Method of Human Capital Measurement

$$C_a = (\pi_a)^{-1} \left[\sum_{t=0}^{a-1} (1+i)^{a-t} \pi_t (c_t - y_t E_t) \right]$$

Finally, we must remember Kendrick’s 1976 proposal regarding the distinction between *tangible* investments in human capital before one reaches the age of 14 and the *intangible* investments, which refer to the cost of enhancing the quality and productivity of an individual’s labour (after the age of 14). Included in intangible investments are the expenditures on education, training, health, safety, mobility and the opportunity-cost of attending school. Although Kendrick’s sophisticated approach seems interesting for a cost-benefit analysis of the flow of resources, it is extremely difficult to apply because the total costs of education, housing, food, clothing, health care and transportation are *not distinguishable* from the costs of investment in human capital (Jorgenson, Fraumeni, 1989). Second, there is *no a linear relationship* between the investment in human capital and the quality of human beings’ output (Le et al., 2003). The investments are made over an *un-produced innate* series of *talents* that differs from one to another, and the success of the same investments are influenced by many contingent factors concerning the variable characteristics of every individual’s life (sentiments, emotions, moral values, religious beliefs and so on).

3.2 Human Capital in the School of Prospective Method

The prospective method is an *income-based approach* grounded in the rate of return of earned income during an individual's life and actualized by means of an adequate actuarial method. This proxy was first developed by William Farr¹⁸² (1853). Taking a microeconomic view, he estimated an individual's human capital as the present *actuarial value* of his expected annual earnings net of maintenance costs. In this elaboration, he took an account of the individual's probability of surviving by analyzing tables of mortality/survival in a finite time horizon. Farr's purpose was to identify the capacity of each individual to contribute to *national taxation* (Hofflander, 1966).

Farr's approach was praised by many scholars, such as Alfred de Foville¹⁸³ (1905) and Alfred Barriol¹⁸⁴ (1910). Irving Fisher¹⁸⁵ (1907) conceived the value of human beings as included in the capital of a nation and adopted (1908) a prospective method for estimating the costs of preventable diseases, while Burton Weisbrod¹⁸⁶ (1961) extended Farr's method by considering sectional data for earnings, employment rates and survival probabilities and by allowing for unemployment, rather than assuming full employment (as Farr did).

Weisbrod defined the present value (V_a) of expected future earnings of an individual at age a in relation to the average expected earnings (Y_x) for that individual at age $a + x$, the employment rate (W_t) at the same age, the discount rate (i) and the probability ($\rho_{a,x}$) of survival to age x of an individual of age a . His formalization, thus, is:

¹⁸² William Farr (1807-1883)

¹⁸³ Alfred de Foville (1842-1913)

¹⁸⁴ Alfred Barriol (1873-1959)

¹⁸⁵ Irving Fisher (1867-1947)

¹⁸⁶ Burton Weisbrod (1921-)

Formula n° 14: Weisbrod’s (1961) Prospective Method of Human Capital Measurement

$$V_{\alpha} = \sum_{x=\alpha}^{\infty} \frac{Y_x W_x \rho_{\alpha,x}}{(1+i)^{x-\alpha}}$$

Finally, John Graham¹⁸⁷ and Ronald Webb¹⁸⁸ (1979) adjusted Weisbrod’s model by examining the growth of expected earnings in a growing economy, an individual’s seniority, and an individual’s process of performing talents. On the other hand, they acknowledged that the value of human capital has market and *non-market dimensions*, explaining that

one of the primary benefits of schooling is certainly the greater efficiency and adaptability displayed by the more educated in performing a myriad of non-market chores such as child rearing, personal finance and homemaking, health investments, search activities and even additional human capital investments.
(1979, p. 212)

Graham and Webb were aware that non-market dimensions are very difficult to measure, and they also realized that the share of returns on human capital incorporated not in personal earnings but in an employer’s profit is *indistinguishable* from the contributions of factors other than human capital (Dagum, Slottje, 2000). In their formalisation, they considered the present value of future earnings ($P V_x^i$) until age N of

¹⁸⁷ John Graham (1950-)

an individual of age x with a vector of characteristics i , an expected growth rate of earning (g_k^i) and an expected interest rate on earnings (r_k^i) that an individual with i characteristics considers consistent for earnings made in year (k), the expected earnings (E_x^i) of an individual with i characteristics at year x , and the probability of being employed (W_x^i) at age x and that of being alive ($\rho_{a,x}^i$) at the same age. Graham and Webb so formulated this actuarial formula:

Formula n° 15: Graham’s and Webb’s (1979) Prospective Method of Human Capital Measurement

$$P V_x^i = \sum_{x=a}^N \frac{E_x^i W_x^i \rho_{a,x}^i \prod_{k=a}^x (1 + g_k^i)}{\prod_{k=a}^x (1 + r_k^i)}$$

However, the economists who these adopted retrospective methods denied the necessity of deducting the “maintenance costs” of human capital for comparing it fairly to the other types of investment. They also neglected that the value of human capital is influenced by a firm’s *demand of labour* (Antonelli, Guidetti, 2008). As a consequence, it is difficult (if not impossible) to determine adequately the discount rate of earnings as instead in the formula of prospective methods is done as well as is difficult (if not impossible) to estimate the level of wages because this varies for many *contingent* factors, such as the syndicates’ contractual force in the agreements with the employers.

¹⁸⁸ Ronald Webb (1951-)

4. Human Capital in the OECD

The Organisation for Economic Co-Operation and Development (OECD) is an international institution that was formed in Paris in 1961 as a continuation of the experience of the Organisation for European Economic Co-operation (OECC). The OECC was created in 1947 to administer American and Canadian aid under the Marshall Plan for the reconstruction of Europe after World War II. In 2010, OECD involved 31 countries from around the world. Among its aims is the attempt to support member states' sustainable economic growth, to boost employment, to raise living standards, to maintain financial stability, to assist the economic development of other nations and to contribute to the growth of world trade. The OECD provides a place where governments can compare policy experiences, seek answers to common problems, identify good practices and coordinate domestic and international policies.

In the 1960s, the OECD called upon several important economists, such as Ingar Svennilson¹⁸⁹ (Swedish), John Vaizey¹⁹⁰ (English), Jan Tinberger¹⁹¹ (Dutch), Michael Debeauvais¹⁹² (Irish), Henning Friis¹⁹³ (Danish) and many others¹⁹⁴ to form a Study Group on Economics and Education. The OECD charged this group with the responsibility of analysing the relationship between human capital and economic growth from a *macroeconomic* perspective. In the 1964 collective publication *The Residual Factor and Economic Growth*, the OECD's economists advanced the notion of human capital as individuals' education, training, and general cultural preparation and tried to measure it by using a series of quantitative parameters. These parameters were constituted by the trends of demography flows, vertical mobility changes and labour market dynamics. The OECD's economists especially took the statistical data from the European context and analyzed them in a strict *input-output logic* (level of education-level of

¹⁸⁹ Ingar Svennilson (1908-1972)

¹⁹⁰ John Ernst Vaizey (1929-1984)

¹⁹¹ Jan Tinberger (1903-1994)

¹⁹² Michael Debeauvais (1915-1993)

¹⁹³ Henning Friis (1920-1996)

economic growth). However, Stefano Spalletti observes that this method is scientifically weak because

in the Sixties the data are usually poor in European countries and the economic systems are a series of loose relationship, both between educational attainment and subsequent occupational classification, and between the level of output and the level of skills inputs. Many of these relationships are purely contingent. (2008, p. 201)

However, the OECD's scholars also considered the *qualitative* aspects of human capital. They highlighted individuals' creativity, spirit of initiative, want of self-realization and desire for fulfilment. Debeauvais argued that these qualitative psychological factors of human capital strongly affect the economic well-being of a society. He wrote:

In the industrial countries economic and social development has revealed chronic shortage of high-level skills, and future requirements of engineers, technicians, or physicians have to be forecast. Even in the developing countries, where unemployment and underemployment mean that there is a manpower surplus, the dearth of skilled workers is acknowledged to be one cause for the disappointing results of investment, or at least the level of returns. An increasing number of countries are therefore endeavouring to strike the proper balance between material investment and the training workers. (1964, p. 521)

¹⁹⁴ We can remember Seymour Harris, Raymond Poignant, Friedrich Edding and Selma Mushkin.

The OECD's team argued for a *manpower forecasting approach*, according to which the education and training of every human being must be modulated in relation to his innate talents and aspirations and to the needs of firms. Friis emphasized that the duty of providing a personalized formation implies the valorisation of every aspect of individual human life by rejecting the planning of standardized courses of study and apprenticeship. Second, he explained that an adequate moral concept of education in the 20th century is matched by a new understanding of the nature of ability, which leads to the “*abandonment of the idea of a fixed ‘pool of ability’ in the population*” (1965, p. 8). Therefore, the political principle of equality is intended in connection to individuals' opportunities for a career, rather than individuals' levels of education and training (Tinbergen, Boss, 1964, p. 148). In synthesis, OECD's Study Group on Economics and Education argued that every human being might exploit his innate talents at the highest degree in order to improve the quality of life of his or her entire society (O'Donoghue, 2009). However, Pedro Teixeira (2005, p. 129-148) observed that the OECD's economists were forced to renounce the requirement that member nations make some political decisions based upon their suggestions. When the OECD's economists concluded their work (at the end of the 1960s), Europe was diffusing a powerful libertarian and socialist *cultural revolution* in schools and universities. In all European countries, the reinforcement of a public education system was based on a warped concept of equality until the innovative education reforms elaborated by Julian Le Grand (1999), an adviser at OECD, and were put into place by Tony Blair¹⁹⁵ in United Kingdom.

In fact, in 2006, the English government approved the Higher Education Bill, which introduced an *innovative system* of payment of university fees. No student has to pay fees because the ‘Student Loan Company’ pays them in his or her place. This company is a public agency to which the students will repay fees, adjusted for

inflation but without interest. What is key is that students will have to repay the money only if they find a good job and receive a good wage. This “quasi-market” system (Bartlett, Le Grand, 1993) has allowed, on one side, every English citizen to study, independent of his or her family or personal wealth (Le Grand, 2002), and at the same time has introduced a competition among public and private universities by stimulating people’s mobility (Le Grand, 2006) in relation to the quality of supplied preparation (better preparation, more students and more money for universities).

5. Human Capital in the School of Capabilities

The school of capabilities has gained ground in economic literature by offering a pattern of economic analysis that is a *radical* alternative to that of economics of well-being. The rigorous scientific worthiness of the capabilities approach was certificated by its adoption by the United Nations Commission on Human Rights. Amartyria Sen¹⁹⁶ (1970b) criticised the fundamental theorems of economic of well-being¹⁹⁷ by experimentally pointing out the disequilibrium (Paretian-inefficiency) of markets characterized by a political, institutional and ethic *vacuum*. For Sen, the point was the guarantee of individuals’ liberty through the development of their human capital and not by the application of the correct rules of utility maximisation for the determination of individual and social choices. In this view, human capital is constituted by the *practical* development of people’s personal values (Sen, 1997). In other words, there is a paradox in the thesis of the economics of well-being: the

¹⁹⁵ Tony Blair’s first victory in the national elections of 1997 was characterized by his slogan: “The three priorities of the United Kingdom are education, education, and education” (Romano, 2005, p. 137).

¹⁹⁶ Amartyria Sen (1933-) was awarded the Nobel Prize in 1998 “for his contributions to welfare economics.”

¹⁹⁷ The economics of well-being states that the better Paretian allocation of resources takes place in a decentralised market economy perfect competition where the state does not interfere and holds that the competitive economy can reach any Paretian-efficient social situation on the border of greatest social utility only by modifying the given endowments of economic operators through instruments of redistribution, such as taxes or subsidising.

principle of free expression of individuals' liberty conflicts with the principle of the maximisation of individual and social utility. To this end, Sen stated:

While the Pareto criterion has been thought to be an expression to individual liberty, it appears that in choices involving more than two alternatives it can have consequences that are, in fact, deeply illiberal. (1970b, p. 157)

5.1 Human Capital in the School of Capabilities: Philosophical Aspects

Beyond the mathematical-statistical method of research employed by the school of capabilities, there is a philosophical background and construction. The philosophical background is related to Martha Nussbaum's¹⁹⁸ lecture on Greek and Roman thought, especially that of Aristotle and Aristotelian scholars. The philosophical construction is based on a low scientific process of building, which culminated with the 1993 publication of *The Quality of Life* by Nussbaum and Sen.

The theory of capabilities approach contrasts with the utilitarian assumption of marginalist economists, according to which the concept of wealth corresponds with the economic growth, while that of poverty corresponds with income absence. In fact, David Levine¹⁹⁹ thought that, besides the more visible aspects of poverty, such as the lack of food or goods of former necessity, we must recognize that

all, or nearly all, humans were born with the potential to live creatively, to do as an expression of being, then poverty means that this potential is somewhat lost, or, if it is retained, that we

¹⁹⁸ Martha Nussbaum (1947-)

¹⁹⁹ David Levine (1948-)

are not enabled by our situation to exercise it. The problem of poverty is then the problem of the loss of capabilities. (2004, p. 114)

As a consequence, the capabilities approach did not conceive of human capital as an instrument for attaining only the quantitative goals of utility maximisation in microeconomic or macroeconomic horizons. In fact, Sen developed (1980/1981) the insight of Justin Gosling²⁰⁰ (1969) and Richard Brandt²⁰¹ (1979) concerning the inconsistency of a supposed objectivity of measurement deriving from the parameter of utility. Sen pointed out that

the psychological features that are reflected in utility ... have to adjust to unfavourable circumstances, thereby affecting the metric of deprivation and their evidential importance. (1985, p. 53)

Sen and Nussbaum thus argued for a new economic epistemology and a new method of economic analysis. They assumed that richness increases in function to the growth of human capabilities, while poverty consists of capabilities deprivation²⁰². For human capabilities, they referred to *substantial freedoms*.

²⁰⁰ Justin Cyril Bertrand (1905-1971)

²⁰¹ Richard Brandt (1910-1997)

²⁰² The Commission on the Measurement of Economic Performance and Social Progress is working on this issue by stating new parameters of judging society's well-being alternatives to GDP. This group of study, commissioned by French president Nicolas Sarkozy is made up of Amartyria Sen, Jean-Paul Fitoussi, Joseph Stiglitz, Kenneth Arrow, James Heckman, Daniel Kanheman and Robert Putnam. The only Italian representative, Enrico Giovannini, publicly explained in 2010 that the experience of this commission is based on the capabilities approach and, contemporaneously, on the confutation of Maslow's 1943 pyramid of needs. For example, he argued that the innate religious sense of every human person is present in any level of well-being and not –as Maslow's argued– only after the satisfaction of basic material necessities.

Human capital is considered a *transversal dimension* of some of the most important of these human capabilities. Nussbaum synthesised (2000, p. 78-80) the principal capabilities in the following list:

- i) Live to an old age;
- ii) Have good health;
- iii) Walk about correctly and steadily;
- iv) Use the senses and the imagination in a useful way for the community;
- v) Think based on a humanistic and mathematical perspective, at least in terms of elementary preparation;
- vi) Shape a clear idea of moral good within one's personal consciousness;
- vii) Cultivate a critical reflection about one's own plan of life;
- viii) Live in community by reciprocally recognizing human dignity;
- ix) Participate in political activities and engage in economic transactions;
- x) Joke, play and enjoy;
- xi) Buy the property of mobile and immobile goods; and
- xii) Respect animals, plants and nature.

On the other hand, Sen used the framework of capabilities in his *Poverty and Famines: An Essay on Entitlement and Deprivation* (1981). In it, he explained that the amount of Bengali production of edible goods was not the cause of the 1943 Bengali famine; instead, the dilemma derived from the lack of other resources, such as the inefficient nature of the food distribution system, the reduction of workers' wages, the growth of prices of products and unemployment. Sen understood the existence of an unbelievable paradox:

The people who died in front of well-stocked food shops protected by the state were denied food because of "lack" of legal entitlement, and not because their entitlements were violated. (1981, p. 49)

However, this application of the capabilities school was criticised by Mark Tauger²⁰³ who affirmed that “*new data indicating that crop failure had a much larger causative role than Sen’s interpretation indicated*” (2003, p. 57).

5.2 Human Capital in the School of Capabilities: Microeconomic Aspects.

The authors of the school of capabilities did not reject mathematical and empirical argumentations of their theories. In fact, Sen provided a *formal pattern* for determining the microeconomic level of happiness (Pigou’s well-being) in relation to the amount of the capabilities and an individual’s personal valuation of them. He defined the following categories:

- *Commodities* (X_i): The goods or services that human beings potentially own. For example, a bicycle or tickets for a show at a theatre;
- *Functionings* (F_i): Describes the emotions experienced by human beings during the exploitation of an available commodity. For instance, riding a bicycle or participating in a show at a theatre;
- *Capabilities* (Q_i): The amount of alternative functions that are available to human beings in a concrete contingent situation. Capabilities thus indicate the degree of freedom of choice owned by a human being. For example, the possibility of choosing between riding a bicycle or participating in a show at a theatre.

At this point, Sen (1985) formalized his thinking by assuming the marginalist conception of individual happiness (H_i) as the utility maximisation function (U_i) of the theoretical functionings f_i related to the commodities consumption function [$c_i(X_i)$]:

²⁰³ Mark Tauger (1954-).

Formula n° 16: Marginalist Function of Individual Happiness

$$H_i = U_i \langle f_i [c_i(X_i)] \rangle$$

Then, he substituted the abstract axiom of individual happiness as utility maximisation with the concrete axiom of individual happiness as the maximisation of the individual's personal valuation (v_i) of the individual happiness function ($f_i [c_i(X_i)]$).

Formula n° 17: Sen's (1985) Individual Valuation Function

$$v_i = v_i \langle f_i [c_i(X_i)] \rangle$$

Finally, he formally defined the set of an individual's capabilities $Q_i(X_i)$ where the theoretical functionings f_i need to be included in the real, concrete functionings F_i .

Formula n° 18: Sen's (1985) Individual Capabilities Function

$$Q_i(X_i) = \langle f_i [c_i(X_i)] \rangle \text{ only when } f_i \in F_i$$

In doing this, he created a formula for the *concrete* degree of individual happiness in relation to the concrete functionings available to him in a precise context and to the characteristics of his personal valuations.

Formula n° 19: Sen's (1985) Individual Happiness Function

$$V_i = v_i Q_i(X_i) = v_i (f_i [c_i(X_i)]) \text{ only when } f_i \in F_i$$

The elaboration of the mathematical pattern of capabilities approach did not aim to provide a new methodological dogma of economic analysis, but rather to state the abstraction of marginalist economics. Sen clarified the need to recognize the *no determinability* of an individual's human capital, which shapes the subjective valuation of his choices of action. In that regard, Flavio Comim (2008, p. 163-165) pointed out that the instruments for measuring the quality of life change in relation to the structural and contingent elements of every individual: the type and the duration of education received, the cultural values of the family, psychological characteristics, the state of one's health, environmental conditions, and so on. The capabilities approach somehow recalled Hayekian argumentation regarding the *unpredictability* of explicit and implicit factors of knowledge that affect the consistency of individuals' human capital. In fact, at the beginning of his career, Sen (1976) understood that econometrics can only provide a hypothesis for partial economic orders (macro as well as micro) and approximate indexes, but cannot calculate the output of complex combinations of determinants that generate the individuals' behaviours (Majumdar, Sen, 1976).

For Sen (1997), human capital is the most difficult economic reality to express quantitatively because it consists of immaterial elements characterized by emotional, affective, cultural and religious aspects. The Sennian proposal thus measures an individual's happiness on the basis of the wideness of available capabilities and prefers not to inquire regarding the qualitative composition of human capital. We can assume that the capabilities approach presupposes a *methodological individualism* because it was conceived from the idea that the formation of an individual's human capital takes place outside the intermediate bodies to which the human being naturally (family) or voluntarily (groups, associations) belongs. Sen's human actor is a lonely being who develops social relationships only for his own interest. In this regard, the capabilities approach is identical to marginalism. In addition, we must remember that Nussbaum and Sen have never individualized any objective criteria of distinction between what is morally good and what is morally evil in human decisions. Therefore, we can affirm that the capabilities approach is characterized by a *relativistic* approach to ethics. We cannot find in the capabilities approach a finality of economic science toward the common good or an organic vision of society. In fact, Séverine Deneulin recognized:

No development policy can be neutral with respect to a conception of good. It is because it is recognized that the malnutrition is a deep offence to a dignified human life that actions can be undertaken to put an end to it. It is because it has been recognised that domination and humiliation are a deep offence to a life worthy of being human that actions can be undertaken to put an end to structures of domination a humiliation. (2002, p. 516)

5.3 Human Capital in the School of Capabilities: Macroeconomic Aspects

As we have just mentioned, the capabilities approach was adopted by the United Nations for its international policies. This international political organism created a commission of scholars of diverse disciplines and charged them with confronting each other to find the *macroeconomic* instruments aimed at improving the concrete well-being of the world's people. Many economists are a part of this working group, including Sen, Mahbub ul Haq, Paul Streeten and Sudhir Anand. They examined the qualitative content of human capital grounded on capabilities approach in depth, and their conceptual synthesis appeared in the first United Nations' *Human Development Report*, where individual and social progress is defined as "*a process of enlarging human choices*" (1996, p. 49). On this point, the economists of the commission elaborated a complex 'Human Development Index' composed by the sum of a series of normalized indices concerning many human capabilities (Anand, Sen, 2000), such as the citizens' medium real wage, hope of life, cultural level and so forth. This multi-dimensional modality for measuring human development was strongly criticised by Partha Dasgupta (1997, p. 77) for its incapacity to state an objective economic parameter of well-being valuation such as, for example, the GDP amount. From the opposite angle of examination, Raymond Apthorpe (1997), another member of the same working group but endowed with a humanist background, thought that the Human Development Index was mistaken because undervalues the more 'human' aspects of human capital and human development. He attacked economists for thinking themselves competent in everything, rather than attributing a normalized value to incalculable features of people's lives, such as their emotions, sentiments, sense of dignity, state of their consciousness and so forth. Apthorpe affirmed:

To merit further credibility they will ... have to be much stronger on social and economic and cultural description than are the present Human Development Report: traders must be brought in

as well as trade, framers as well as farm, educators as well as education. (1997, p. 23)

ul Haq positively accepted these difficulties because, in his opinion, “*stagnant ideas die quickly*”, while lively scientific debate is useful for “*further evolution in many directions*” (1998, p. 225) in understanding and then solving economic problems. In fact, in response to Dasgupta’s and Apthorpe’s, critics Sen outlined his idea of human capital in a 1997 paper, ‘Human Capital and Human Capabilities’. Vivian Walsh (2000) comments that Sen tried to develop Smith’s works concerning human capital in an alternative way than that of marginalist economists. The former again proposed the Smithian no mathematical conception of human capital rather the latter, as we have seen, enriched the Smithian assertions of analysis grounded on marginal utility. Sen goes beyond “*the marginalist dogma of the sharp fact/value distinction and of the ‘meaningless’ of value*” (Walsh, 2000, p. 6). He emphasized the importance of human capital growth for individual happiness and for society’s well-being. Sen wrote:

If education makes a person more efficient in commodity production, then this is clearly an enhancement of human capital. This can add to the value of production in the economy and also to the income of the person who has been educated. But even with the same level of income, a person may benefit from education, in reading, communicating, arguing, in being able to choose in a more informed way, in being taken more seriously by others, and so on. The benefits of education thus exceed its role as human capital in commodity production. The broader human capabilities perspective would record –and value– these

additional roles. The two perspectives are, thus, closely related but distinct. (1997, p. 1961)

Das Gasper (1997) classified Sen's human capital as being constituted by three categories of capabilities:

- *S-Capabilities*: Indicate the individual's attitude when approaching something, his capacity of doing something and his ability of managing something;
- *O-Capabilities*: Refer to the individual's alternative chances in terms of opportunities and options that are available in a certain circumstance;
- *M-Capabilities*: Express the individual's cultural identity, moral convictions, religious ideals and openness to social relationships.

For Sen (1997), the M-Capabilities are basic for the realization of human action and for the success of the S-Capabilities and the O-capabilities. In fact, without adequate M-Capabilities, skills could be wrongly oriented, larger option sets could cause confusion and disorientation and external constraints could be automatically internalized with no critics or reactions (Lanzi, 2007). However, as Stefano Solari has noted, the M-Capabilities represent "*an expression of "Kantian rationality" and "intrinsic motivation" arguments with an endogenisation of norms*" (2005, p. 413). This confirms that, for the capabilities approach, humans are seen as individualistic beings who engage in social relations only if they have internalised a norm of altruism in their human capital. Human capital depends on Kantian traits acquired by the education of the consciousness. Sen reduced the spiritual aspect of human beings to a cause-effect mechanism. In other words, the capabilities approach affirms the necessity of developing substantial freedoms (capabilities) by introducing an incoherent moral liability that automatically eliminates the attainment of an individual's happiness. Sen confuses morality, which is to do freely what is just, with moralism, which is to be forced to do what is just. The experience always proves that humans attain happiness exclusively with morality (i.e., she does what she wants and she wants what is just, while the human suffers

frustration when she acts out of moralism). As a consequence, the Sennian concept of human capital supposes an *atomistic* vision of society and a *selfish* anthropology like the notion of human capital favoured by marginalist economists. Under the capabilities approach, only the social rules based on the good reputation paradigm or on the fear of making a mistake (to violate the Kantian due) stimulate humans to act ethically.

6. Conclusions

We have listed the schools of thought that are alternatives to the marginalist mainstream and which examine the topic of human capital in an original way. Obviously, every school has a heterodox approach for itself that distinguishes it from all others. In this chapter, we cannot thus find a common pattern that somehow unites the paragraphs. However, all of the mentioned schools attacked the marginalist paradigm of “homo economicus” and the axiom of utility maximisation. German historians proposed an *antithetic epistemology* of economic science by arguing for the nonexistence of economic laws and the duty of using economic history and statistics to develop any sort of economic analysis (Shionoya, 2001). In this view, the nation’s economy needs a legislative pattern if it hopes to work efficiently, and the state must play a paternal role in the markets, included taking on the role of promoting economic education. German historical scholars maintained that human capital of every citizen has an effect on the process of forming the entire populace’s *cultural identity* and *spirit* .

On the other hand, the heterodox schools’ mode of measuring of human capital value did not agree with the assumption of the Chicago marginalist school regarding the rationality of an individual’s choices. Engels introduced (1883) a *cost-based approach* wherein the individual’s human capital is estimated in relation to his parents’ expenditures made to support his rearing. In an attempt to quantify the immaterial wealth of a nation from a macroeconomic perspective, Dublin and

Lotka (1930) also took account of the individual's possibility of surviving to a certain age and of being employed when determining the cost of human capital net of the earnings received by that individual. On the contrary, Far (1853) advanced an *income-based approach*, where the individual's human capital is estimated as a function of his capacity for creating flows of wages or money entries. Graham and Webb extended (1979) this microeconomic model by including the notion of an individual not only surviving to a certain age and being employed, but also receiving bigger earnings with an increasing economy and the augment of his seniority.

Finally, we have dealt with the contributions of the economists of OECD and those of the school of capabilities approach. They both preferred to highlight the *qualitative* aspects of human capital, although they did not neglect the analysis of quantitative ones. OECD's scholars pointed out the relevance of some features of individuals' human capital, such as creativity, the spirit of initiative, the desire for self-realization and the desire for fulfilment (Debeauvais, 1964). Second, the OECD's team suggested the urgency of states planning education policies accordingly a *manpower forecasting approach* and reinforced their capacity to encourage the working vocations of every citizen while also working to develop the human resources that firms require (Friis, 1965). On the other hand, Nussbaum and Sen (1993) conceived of human capital as a *transversal* dimension of some human capabilities, intended as substantial freedoms of individuals. Sen (1997) stated that human capital affects an individual's practical knowledge, working competences, technical capacities and problem solving abilities, and *no market* capabilities (M-capabilities). He referred to the benefits of education and training concerning an individual's attitude toward correct behaviour, persuasive communication and making choices in a more informed way.

In the end, we can affirm that the heterodox proposals seem interesting mainly in light of having discussed the epistemological paradigms and methodological postulates of marginalist economic praxis of analysis. Nevertheless, these heterodox approaches maintain the philosophy of the mainstream concerning the

anthropological conception of human being. All of the mentioned scholars advanced an *individualist* vision of humans by rejecting the Aristotelian-Thomist valorisation of the social nature of man and by neglecting the importance of intermediate bodies for the development of human personality. Second, they supposed, like marginalist authors, that there are subjective and relativist ethics at work behind humans' actions that cannot be the objects of economists' assertions. However –as Deneulin (2002) admitted– we cannot say that an economic decision is good or not if we do not define the objective criteria of what is and is not good from a perspective of morality (not of moralism *à la Sen*).

Third Section. Human Capital in the Personalist School: An Interesting Perspective

Chapter 1

Human Capital and the Concept of Person

1. Introduction

In the literature, the economists often confuse the concept of “human person” with those of “human agent”, “human operator” and “human individual”. In our opinion, it is thus necessary to set forth the ethimological origin of the person word and to indicate what characterizes this concept. Therefore, we briefly try to describe the historical, philosophical and theological roots of personalism, while in the successive chapters we will analyse the economic personalism promoted by Catholic economists and Popes.

2. The Ethimological Meaning of the Word Person

At the beginning, the person word indicated the face of the theatre actor, stemming from the etymologic Greek origin of “*prósopon*” (Nédoncelle, 1970, p. 47–184). This original reference contains an emphasis of the originality of every man because the characteristics of his human face –often more so than those of his body– distinguish him from others. Moreover, Aristotle described (Politics, 1.1253a) man as a “political animal” for highlighting his social nature. Aristotle argued that man alone shares in God’s nature by virtue of intelligence, is capable of communing with God and who achieves his full potential through his development of his shared nature and his divine intellect. Indeed, for Aristotle, happiness is the goal of human existence, virtue is the exercise of human moral values and a human

being's body and soul are linked to one another, as matter is to form (Tarnas, 1993, p. 61–67).

Successively, in Tertulliano's works, the notion of "person" was explicitly used in a theological sense to refer to the *ontology* of the figures of the Christian God: God-Father, God-Son and God-Holy Spirit. The three figures are distinct personal entities but basically connected each other in a mutual relation of love. The Christian God is actually an unique being constituted by three personal entities.

Saint Augustine also chose the Greek term "*hypostasis*" and the Latin correspondent "*persona*" in his reflections concerning the *universal dignity* of humans and their uniqueness. He stated that "*every single human being is a person*" (De Trinitate, XV.7.11) so as to point out the individual nature of the human being and, at the same time, his social nature. For Saint Augustine, man naturally lives in communities where he influences and is influenced by the other members. Anyway, man ultimately maintains his ontological autonomy because he is naturally endowed with his own personhood.

Finally, in the 451 Council of Chalcedon the notion of "person" acquired an official definition. In the 34th proposition of the Fifth Session (Price, Gaddis, 2005, vol. 2, p. 204) appeared a clear explanation of Christian anthropology. The Council Fathers wrote this pronouncement²⁰⁴:

We all in harmony teach confession of one and the same Son our Lord Jesus Christ, the same perfect in Godhead and the same perfect in manhood, truly God and the same truly man, of a rational soul and body, consubstantial with the Father in respect of the Godhead, and the same consubstantial with us in respect of the manhood, like us in all things apart from sin,

²⁰⁴ Accordingly, the canon law the Council fathers' statements need of the official *placet* of Pope for becoming part of the doctrine of the Church.

begotten from the Father before the ages in respect of the Godhead, and the same in the last days for us and for our salvation from the Virgin Mary ... one and the same Christ, Son, Lord, Only-begotten, God, Word, Lord, Jesus Christ, even as the prophets from of old and Jesus Christ himself taught us about him and the symbol of the fathers has handed down to us.

Starting from this point of history of the Church, the person word was used to denote the human being as an entity concretely made at the same time by body and soul *with an analogy* to Christ, who was contemporaneously constituted by a divine and a human nature. In Catholic thought, the human person is not a soul embodied nor a body spiritualized. Any component of man does not prevail over the other. The human body *constitutively* exists because there is the human spirit and *vice versa*, even in cases of possible psychological or physical malformations. In fact, in the Bible, the soul word often indicates the spiritual principle, which animates the entire human person, while the human body is intended as the whole human person that is intended to become, in the body of Christ, a temple of the Spirit. For Catholics, the human person is not an assembled reality of two factors of different natures but an *original* and *united* being, characterized by two aspects. The Catholic tradition indicates this particular ontology of the human being by using the expression “dual unity”. The unity of soul and body is so profound that one has to consider the soul to be the “form” of the body: it is because of its spiritual soul that the body made of matter becomes a living human body.

In the *Summa Theologiae*, Thomas Aquinas developed the Boethius’s neo-Aristotelian definition of person as “*an individual substance of a rational nature*” (Liber de persona et duabus naturis, III.2). Thomas argued that what is understood by spiritual knowledge cannot be considered as something inside the order of material nature. The ultimate truth of created reality (the person of Christ) emerges and communicates itself within a human relationship because it has a personal

character. This implies, on the one hand, that Boethius's rational nature of the person (the spirit) does not have an autonomous nature in respect to the human body and, on the other hand, that God must be a lively and bodily person who acts in the world of today. The theological point is thus the truth of the mystery of the *living* and *personal* presence of Christ risen again to men of any era. Secondly, we can observe that in Thomas' thought the *personhood* of God and that of the human person are equally strictly connected to their *creativity, intelligence, freedom* and *responsibility*. As a consequence, Thomas emphasized the person's penetrating cognition of the multitude of God's created objects in the world –their order, their dynamism, their directedness, their finiteness, their absolute dependence on something more– that revealed, with the culmination of the universe's hierarchy, the existence of an infinite highest being, an unmoved mover and first cause.

3. The Concept of Person *versus* That of Individual

As we have seen, the human being in economic literature is almost always conceived as an individual. An individual means a lively organism, which is one of a homogenous series of other animals and is somehow divisible in sub-sections (mind versus body, psychological needs versus biological ones and private behaviours versus public ones). This definition contains a *biological* connotation of man aimed to shape a *deterministic* configuration of economic science (Rubio de Urquía, 1998). In effect, the paradigm of “homo economicus” views the human agent as being endowed with all the information regarding his alternatives of choice and that he makes decisions on the basis of a cold calculus of expediency. Man's configuration is *aseptic* because it supposes a perfect rationality and a lack of emotions, sentiments and relational needs. The individual has utility maximisation as his only parameter of judgment. Moreover, utility maximisation is expressed in mathematical and quantitative terms in order to easily determine the hierarchy among the available options of action. For example, if we apply the Beckerian theory of human capital, we affirm that an individual prefers to attend courses on

business administration at university instead of the philosophical ones, exclusively (not partly) because managers usually receive higher wages than teachers do.

Nevertheless, this approach of economic analysis appears insufficient because it does not take account of all the factors that affect human decisions. In other words, the individual is exactly valued as if he were a *material asset*: the investments made on him have to be amortized in constant depreciation changes in a supposed horizon of useful life and, then, compared with those alternatives. It deals with an attempt to objectivise the expediency of all actions by reducing the judgment on every aspect of life on the basis of a *cost–benefit analysis*. In this view, the individual's profit can be explicit and thus quantifiable through a yield rate or implicit because it produces a pay-off in the long term. A human decision aimed at an explicit profit is the choice of a type of university study rather than one aimed at an implicit profit, such as good relations with working colleagues. In any case, when we consider a human being as an individual we refer to a human capital characterized by a *constitutive instrumentality* used for the attainment of selfish purposes (clear or hidden).

Instead, in the 1995 paper *Having Alternatives, Being Free and Being Responsible*, Carlo Berretta proved that the human decisional process is determined by human liberty as well as by being influenced by a series of historical and contingent determinants. In the literature, many other qualified studies have confirmed that the growth of person's human capital depends on the economic–political situation of the geographical location where the person lives (Vinci S., Vinci C., Garofalo A., 2002), the typology of the family in which she grows up and develops (Lima, Vassiliadis, 2006), the social context where she is called upon to operate (Dongili, Zago, 2003) and the cultural tradition that she learns (Murat, Paba, 2002). Therefore, as Polanyi and von Hayek argued, it is necessary to eliminate the utopian idea of an abstract human being as being perfectly rational. Man is not a product of a laboratory. Secondly, we must necessarily admit the existence of *no selfish* values in human beings. Aristotle and Thomas correctly believed that the human being is structurally *relational* and in relations, he

experiences friendship and reciprocity as well as antipathy and clashes. Exactly at this point does the concept of person surpass that of the individual. In fact, we do not attach the concept of person to economic analysis for religious reasons but we honestly recognize that a suitable economic analysis capable of analysing the economic facts needs a proper anthropology (Rubio de Urquía, 1998). This anthropology corresponds to a Christian one not held in a perspective of faith –from the top of Revelation to the bottom of the human condition– but in a perspective of reason grounded on the observation of the human condition –from the bottom of the human condition to the top of Revelation (Pope John Paul II, 1998).

In fact, “*though made of body and soul, man is one*” (*Gaudium et Spes*, n.14) in every field of his activities. Hans Urs von Balthasar²⁰⁵ maintained that human freedom and human self-consciousness render the person somebody who “*excludes every and any community with others*”²⁰⁶ (1976, p. 365). On the other hand, in the same page he added that in the praxis of human relations is implied “*a creation of a time and a place of community where to reciprocally each other*”²⁰⁷. The “dual unity” of the human being actually implies that the human person is a social individual. There is not a human being exclusively individual nor is there one who is exclusively social. Indeed, Cardinal Angelo Scola explained:

*Man is a united being capable of transcendence, capable of transcending the human community which belongs to, and nevertheless his destiny is irremediably connected with that of his community.*²⁰⁸ (1991, p. 113).

²⁰⁵ Hans Urs von Balthasar (1905–1988)

²⁰⁶ We do not know the German and we have not found the English version of this text. The translated quotation in the Italian version is “*esclude ogni e qualsiasi comunanza.*”

²⁰⁷ We do not know the German and we have not found the English version of this text. The translated quotation in the Italian version is “*un comune in cui ci si elide a vicenda.*”

²⁰⁸ The original Italian quotation is “*l'uomo, in quanto totalità unificata, è un'unità auto-ponentesi, capace di trascendenza, capace anche di trascendere la comunità umana cui appartiene, e tuttavia il suo destino è irrimediabilmente intrecciato con quello di tutti i suoi simili.*”

As it is written in the Bible, the human being has been created as an *image* of God (Genesis, 1, 27). Moreover, according to the Church, God attached so much importance to the salvation of every human person that he did not spare his own Son for the sake of man. In fact, the pastoral constitution *Gaudium et Spes* of the Second Vatican Council stated:

The truth is that only in the mystery of the incarnate Word does the mystery of man take on light. For Adam, the first man, was a figure of Him who was to come, namely Christ the Lord. Christ, the final Adam, by the revelation of the mystery of the Father and His love, fully reveals man to man himself and makes his supreme calling clear. It is not surprising, then, that in Him all the aforementioned truths find their root and attain their crown.
(n.12).

The perfect communion of persons of Trinity (Pope John Paul II, 1992) is thus the only suitable paradigm for understanding human nature. The Father and the Son constantly live in a reciprocal total gift relation (*caritas*) whose fruit and nexus is the Holy Spirit (Pope Benedict, 2006). For analogy, man fulfils himself in freely giving his adhesion to the lively and personal presence of Christ risen again and present here and now within the Church (there is no Christ outside of Church, but Christ is a distinct reality from the Church) (Pope Benedict, 2008).

As a consequence, what distinguishes the person as an individual is her *openness to transcendence*. This point is decisive for affirming the other specific characteristics of a human person (Lombo, Russo, 2005, p. 145-160):

- *Irreducibility*: the person is somebody and not something obtaining by the sum of biological, psychological and affective elements. The human

person has, constitutively, a desire to discover the meaning of the entire reality (ultimate truth).

- *No repeatability*: every person is unique. There is not an abstract person but a “this” or “that” real and concrete person. So much so that a couple wait the birth of “a” child and not of “that” child who will be born;

- *Inalienability*: the fact of being a person is never eliminable even in the extreme cases where there are a lack of physic elementary capacities;

- *Entirety*: the person is not a part of a bigger entity such as society or the universe but she owns an ontological fullness from her conception until her natural death. The human person is capable of self-knowledge and of self-possession. The person can never be an instrument but must always be a target for herself;

- *Relationships*: the person lives in a network of unique and particular human relations, which develop and intensify in accordance with the evolution of her history. The human person shapes her personality within these intermediate bodies.

In front of these *objective* anthropological data, we can understand that the reduction of the human being to an individual is deeply ideological. The possibility of manipulating, classifying and managing the needs and the wants of people in a mathematical-statistical way has historically been the stuff of dictatorships. For Hannan Arendt²⁰⁹ (1951), all ideologies have always neglected the dignity of human life and have always tried to destroy the positivity of a free social life of intermediate bodies. In this dissertation, we have just demonstrated that the individualist culture wants to direct the human capital of people for the purposes of individual and social utility. On the contrary, we will discover that the Catholic culture forever promotes the *integral* development of every human person and every human community. In this approach, the human capital of people is oriented

²⁰⁹ Hannan Arendt (1906–1975)

towards the reaching of the *common good*. The person is actually conceived as a being directly created by God in his image and she thereby constitutes –quoting the words of Cardinal Franco Cafferata– “*the reality more perfect, more valued which exists in the world: the whole world has less value than a person*”²¹⁰ (2006, p. XVIII).

4. Conclusions

It is believed that Catholic social thought was born with Pope Leo XIII’s *Rerum Novarum* encyclical letter, as this was supposedly the first document where the Catholic Church dealt with social and economic topics. This observation was successfully disproved by Alberto Peratoner, who collected (2009) some economic and social insights of magisterial teachings in a lot of precedent documents of popes. In any case, Pope Leo XIII was the first successor of Saint Peter to dedicate an entire encyclical letter exclusively to economic and social questions (Felice, Asolan, 2008). He tried to respond to the conditions of emergence of the working class of the end of the XIX century derived from the practice of an unlimited liberalism. Pope Leo XIII²¹¹ thus suggested a “third way” for the economic system as an alternative both to capitalism and to socialism (Solari, 2008).

Although in the history of Catholic social doctrine it is never possible to undoubtedly identify who has influenced an encyclical writing, it is common to guess the Popes’ collaborators. Only the Pope officially signs the text of an official document and he usually does not insert quotations or references of economists but exclusively of his predecessors, the fathers of the Church and the saints (Misner, 1992). Nevertheless, we can compare the similarity of passages of every encyclical text with chronologically precedent papers of the Pontiff’s supposed collaborators in order to find the convergences (Alford, Clark, Cortright, Naughton, 2006).

²¹⁰ The Italian original quotation is “*la realtà più perfetta, più preziosa che esista al mondo: l’intero mondo vale meno di una persona.*”

²¹¹ Vincenzo Gioacchino Raffaele Luigi Pecci (1810–1903)

According to Paul Misner (1991), the text of the *Rerum Novarum* encyclical letter was grounded on the social speeches of monsignor Wilhelm Emanuel von Ketteler²¹², Bishop of Mainz, of the middle of the XIX century, and was influenced in the moment of editing mainly by the *Union de Fribourg*²¹³ and the Italian Neo-Thomist scholars, such as Father Luigi Tapparelli d’Azeglio, Father Matteo Liberatore²¹⁴ and Cardinal Tommaso Zigliara²¹⁵. After the publication of *Rerum Novarum* in the economic literature, the Catholics gave way to the school of thought called “Social Catholicism”, whose more important exponents were Giuseppe Toniolo²¹⁶ and Monsignor Salvatore Talamo²¹⁷ in Italy; Father Heinrich Pesch²¹⁸ S.J., Father von Neull-Breuning²¹⁹ S.J. and Father Bernard Dempsey²²⁰ S.J. in Germany; and Goetz Briefs²²¹ in the United States (O’Boyle, 2002). They much influenced the content of Pope Pius XI’s²²² *Quadragesimo Anno* (1941) as well as Pope Pius XII’s²²³ pronouncements on economic matters.

During the entire pontificate of Pope John XXIII²²⁴, Catholic social thought was at the centre of the re-constituted²²⁵ *Settimane Sociali dei Cattolici Italiani*²²⁶, whose leaders were Cardinal Pietro Pavan²²⁷ and Francesco Vito²²⁸. These two scholars thus strictly collaborated with Pope John XIII in the writing of *Mater et*

²¹² Wilhelm Emanuel von Ketteler (1811–1877)

²¹³ The English translation of the title is “Friburg Union”.

²¹⁴ Matteo Liberatore (1810–1892)

²¹⁵ Tommaso Zigliara (1833–1893)

²¹⁶ Giuseppe Toniolo (1845–1918)

²¹⁷ Salvatore Talamo (1844–1932)

²¹⁸ Heinrich Pesch (1854–1926)

²¹⁹ Oswald von Neull-Breuning (1890–1991)

²²⁰ Bernard Demspey (1903–1960)

²²¹ Goetz Briefs (1889–1974)

²²² Ambrogio Damiano Achille Ratti (1857–1939)

²²³ Eugenio Maria Giuseppe Giovanni Pacelli (1876–1958)

²²⁴ Angelo Roncalli (1881–1963)

²²⁵ At the beginning, the *Settimane Sociali dei Cattolici Italiani* were promoted in 1907 by Giuseppe Toniolo but in 1934 were prohibited by Fascism. These cultural meetings were re-introduced in 1943 until 1970 and for another time period from 1991 until today.

²²⁶ The English translation of the title of these cultural meetings is “The Social Weeks of Italian Catholics”.

²²⁷ Pietro Pavan (1903–1994)

²²⁸ Francesco Vito (1902–1968)

Magistra (1961) and *Pacem in terris* (1963). On the other hand, Pope Paul VI²²⁹ embraced the community personalism of Emmanuel Mounier²³⁰ and Jacques Maritain²³¹ in the elaboration of his *Populorum Progressio* (1967) encyclical letter, where he introduced the new concept of the “integral human development” of every person and of every people.

Finally, the election of Karol Wojtyła²³² to the papacy (1978) brought many novelties into Catholic social doctrine, although in the respect of continuity. The original philosophical background of Pope John Paul II was on the basis of his encyclical letters *Laborem Exercens* (1981), *Sollicitudo Rei Socialis* (1987), and *Centesimus Annus* (1991), where human capital was considered from an interesting new perspective. The Wojtylian economic framework was developed from diverse perspectives in the United States by the personalist school, guided by Peter Danner²³³ and Edward O’Boyle, and by the Neo-Conservative one, led by Michael Novak and George Weigel. The Italian school of civil economy also developed John Paul II’s teachings and its leader, Stefano Zamagni, deeply collaborated with Pope Benedict XVI²³⁴ in the writing of the recent social encyclical letter *Caritas in veritate* (2009).

²²⁹ Giovanni Battista Montini (1897–1978)

²³⁰ Emmanuel Mounier (1905–1950)

²³¹ Jacques Maritain (1882–1973)

²³² Karol Wojtyła (1920–2005)

²³³ Peter Danner (1921–2008)

²³⁴ Stefano Zamagni attended the first public presentation of the text of the encyclical with Cardinal Renato Martino, Cardinal Joseph Cordes and Bishop Giampaolo Crepaldi.

Chapter 2

Human Capital in the Neo-Thomist Movement and in Pope Leo XIII: The View of Social Catholicism

1. Introduction

We have just stated that von Ketteler was somehow the prophet of the contents of *Rerum Novarum*, while the Italian Neo-Thomist school and the *Union de Fribourg* significantly influenced Pope Leo XIII's statements in the final draft (Almodovar, Texeira, 2008). In fact, Pope Leo XIII indulged the suggestions of the Cardinal Gaspar Marmillod²³⁵, leader of the *Union de Fribourg*, regarding the stimulation of the birth of labour associations, the creation of international agreements on labour rules²³⁶, the view of the state as an instrument to reform the economy and the exhortation to develop the frame of Catholic *corporatism* elaborated by René de la Tour du Pin²³⁷ (Nitsch, 1990).

It is noted that other scholars also tried to influence Pope Leo XIII. We must mainly mention the Cardinals Henry Manning²³⁸ and James Gibbons²³⁹, who studied the social question with special reference to the Anglo-Saxon world, and the Belgium group of Frédéric Le Play²⁴⁰ and Charles Périn²⁴¹, who organized the famous public meeting called “Congress of Liège”. These two schools of thought were in favour of a *liberal* society and sought a limited role for the state concerning the protection of rights and repression of abuses. They believed that the person's freedom of belonging to the intermediate bodies was the ground for improving social problems (Gaburro, 1997).

²³⁵ Gaspar Marmillod (1824–1892)

²³⁶ Before 1891, Count Albert Marie de Mun (1841–1914) led a series of French pilgrims to Pope Leo XIII to stimulate his intervention regarding human dignity protection, the sufficient-wage level and the Christian customs of workers.

²³⁷ Renè La Tour du Pin (1834–1924)

²³⁸ Henry Edward Manning (1808–1892)

²³⁹ James Gibbons (1834–1921)

²⁴⁰ Frédéric Le Play (1806–1882)

²⁴¹ Charles Périn (1815–1905)

However, in this work, we will deal with only with the conception of human capital from the principal thinkers of the Neo-Thomist movement (Solari, 2007): Bishop von Ketteler of Mainz, author of the most important economic work (1864) that precedes *Rerum Novarum* regarding a radical critique of classical political economy and the free market principle; Tapparelli, the co-founder of the official Jesuit review *La Civiltà Cattolica*²⁴²; and Liberatore, the first ghost-writer of the *Rerum Novarum* encyclical letter. On the other hand, in the Neo-Thomist group, Cardinal Tommaso Zigliara, editor of *Rerum Novarum*, and Monsignor Gabriele Bocalli, the private secretary of Pope Leo XIII (Masnovi, 1923) can also be included.

2. Human Capital in von Ketteler

Pope Leo XIII defined Ketteler as his “*great predecessor*” (Metlake, 1912, p. 5) speaking of him with Kaspar Decurtinis²⁴³, a Swiss Catholic sociologist. In fact, Ketteler was a central figure in Catholic social thought for his approach to the “social question” (Ryan, Husslein, 1920). He had taken a law degree during his studies in the seminary and in 1835 entered government service as a law clerk but he resigned from the government in protest against Prussia’s treatment of the Archbishop of Cologne in a celebrated marriage dispute in 1838. In addition, Ketteler was distinguished from other priests due to his economic background, which was publicly displayed when he was appointed Bishop of Mainz in 1850 and became the spiritual leader of the German Catholic movement (Brauer, 1932, p. 26–31). His economic view was based on the Thomist framework of an *ordered* and *organic* vision of society and of an interpretation of Catholic faith as an *incarnational experience* which even affects human material needs.

²⁴² The English title is *The Catholic Society*. This review has a particular authoritativeness in the Catholic world because its publication is subordinated to the approval of the Vatican Secretary of State.

²⁴³ Kaspar Decurtinis (1855–1916)

In 1864, in *Die Arbeiterfrage und das Christentum*²⁴⁴, von Ketteler rejected the economic theories of socialism as well as of liberalism. In his opinion, the former was built on principles that were inherently flawed from the perspective of economic efficiency and embraced atheistic, anti-Christian and anti-clerical ideas. The latter proposed an atomistic conception of society and an individualist mentality, provoking the immiseration and starvation of the working class. On the contrary, von Ketteler maintained that there should be a *revival* of the economic system of the Middle Ages grounded on the valorisation of the human capital of every person (Pecorari, 1977). For von Ketteler, it was necessary to outline a legislative pattern capable of organically directing the workings of human society towards the *common good*. This Kettelerian community constituted an individual and social end *per se* because within it the human person flourishes in terms of her human capital. Regarding this, the Mainz bishop affirmed:

*The principle of organization which brings people as well as raw materials together into powerful unity is a principle that is operative in the plant and animal world, as well as for man and for the human race, and, for that matter for the entire universe. It originates, of course, in the eternal intelligence and power and love of God, and it shows up on earth in two forms. There is a merely mechanical, external type of organization bringing things together in a superficial, accidental manner; and there is the organic unification which brings things together in a lasting substantial way. The modern cooperative principle would fasten men together in a mechanical fashion, whereas God unites men organically as cooperatives formed by men in ages past were united organically.*²⁴⁵ (1864, p. 349)

²⁴⁴ This publication was translated in English with the title *The Labour Question and the Christianity*.

This *solidarist* approach was nourished by the emphasis on the importance of ethical guides. At the root of the German ethical economy, von Ketteler thought that the development of people's human capital was especially connected to *moral* elements. In Ketteler's mind, if human persons practice *civic virtues* inspired by Catholic morality, such as honesty, collaboration, reciprocity and trust, the market is transformed into an instrument at the service of humankind. As a consequence of this, von Ketteler wanted to apply this solidarist approach to the *labour regulations* by trying to improve the form and the scope of workers' associations (Dietrich, Fröhlich, 1996). Regarding this point, he praised the attempts at creating new forms of institutions for stimulating workers' participation, promoted on one side by the liberal Schultze-Delitzsch²⁴⁶ and, on the other side, by the socialist Ferdinand Lassalle²⁴⁷. Von Ketteler wrote many times to Lassalle, whom he agreed with on the *theory of wage*. They thought that if local labour was required to compete with immigrant labour, and if all human workers were required to compete against machines, then the law of competition would demand in every case that the cheapest labour would win. Secondly, the cost of labour would be held down to the minimum required to keep a labourer alive (Ryan, 1915). In times of an excessive supply of labour, workers would mechanically be condemned to starvation. Von Ketteler was thus aware of the necessity of culturally diffusing the *moral primacy* of human capital on material capital for the un-reducible value of human dignity. In fact, he stated:

The atomization of human beings to the status of identical, individual, nuclear particles –an approach that is in perfect harmony with the materialistic outlook– would warrant the winds of chance scattering these particles in haphazard fashion anywhere on earth. People are not mere numbers, nor are they

²⁴⁵ We do not know the German and we thus read this work in English.

²⁴⁶ Hermann Schultze-Delitzsch (1808–1883)

²⁴⁷ Ferdinand Lassalle (1825–1864)

*all of identical value ... absolute social equality is errant nonsense which contradicts nature. The manifold physical and intellectual capacities of men are of infinitive variety, and they are immeasurably increased by the different cultural influences which operate in a vast variety of environmental circumstances.*²⁴⁸ (1864, p. 334-335)

Von Ketteler believed that man supported himself in so much as he was able in any circumstance to survive, because God had given him the capacity to accomplish this end. Anyway, for von Ketteler, in planning labour policies, they must take account of the immeasurable range of bodily and mental capabilities with which different human beings are endowed (Briefs, 1983). Human persons have the same un-reducible dignity but their human capital is different from one to another. Moreover, the cultural and technical formation of a person changes with experience and age. In any case, von Ketteler argued that the state must recognize and support the role of *intermediate bodies* in the *integral* flourishing of the human capital of every person. In describing a human being as a person, von Ketteler thus refers to the paradigm of “homo socio-economicus” (O’Boyle, 1994). In fact, in family, associations, groups and so forth, man is not abandoned in his individual capacities and limits in a naked daily competition with the rest of humanity but he is accompanied to perform his innate talents and to learn the social values within a solidarist relation and in the perspective of the attainment of the common good. Otherwise, von Ketteler advised and predicted:

If the entire human race is to be organized along the lines of unrestricted free enterprise, unlimited free entry and freedom of movement, as well as complete freedom to form and dissolve the

²⁴⁸ We do not know the German and we thus read this work in English.

*family structure as one wishes, and if this liberal-rationalistic computerized society is then allowed to run its inevitable course according to ineluctable mathematical laws, the absolutely inevitable outcome would be that each day those digits which do not perform up to a certain level of efficiency would have to be sorted out and eliminated in the general free-for-all competition. Such a first principle of society can scarcely offer a cure for the problem which beset the working class. It will rather aggravate an already intolerable situation by calling into play the cruellest kind of competitive struggle. Without fail, the worker's wage will be driven to the lower level possible –the level of sheer subsistence; and indeed, even this wage will be paid only to those workers who are at the peak of their physical and mental powers. That would be the mathematical consequence of such a purely mechanical-mathematical process!*²⁴⁹ (1864, p. 335-336).

3. Human Capital in Tapparelli D'Azeglio, S.J.

In the years preceding the publication of Pope Leo XIII's *Rerum Novarum* encyclical letter, the Thomist thought of a unitary conception of reality was especially updated by Luigi Tapparelli d'Azeglio, S.J. This scholar was invited by his superior, Father Jan Philipp Roothan, to again introduce in the Jesuit review, *La civiltà cattolica*, the systematic Scholastic approach to scientific research for finding the elements of synthesis which connect the new discoveries of metaphysics, philosophy, ethics, sociology, psychology, law and economics with Catholic theology (Dante, 1990). This represented an attempt to build social sciences that were compatible with religion because Thomism became the official philosophy of the Church with Pope Leo XIII's *Aeterni Patris* (1881) encyclical letter (Solari, Corrado, 2009a). Thomas argued that every aspect of reality,

²⁴⁹ We do not know the German and we thus read this work in English.

everything and every action, acquires the just meaning only in relation to the *ultimate value* of the entire reality. He defined this ultimate meaning as the truth of “*adjusting the human intelligence to the real substance of reality*”²⁵⁰ (*Summa Theologiae*, I-I q. 16 a.1). For Thomas, real knowledge is only possible through the exploitation of the human capital of a person in the light of the Truth, i.e. the fact of incarnation and the resurrection of Jesus Christ.

Tapparelli advanced an attempt at integrating Christian anthropology with the new sciences. He thus established a coherent view of society inclusive of economics. In his book, *Saggio teoretico di diritto naturale poggiato sul fatto*²⁵¹ (1839), we can metaphorically affirm that Tapparelli viewed economics as a course of water which has to flow within the riverbed of law (such as is seen in the German ethical school). The legislative pattern must be ethically oriented by values deriving from moral natural law that actually *coincide* with those of Christian morality (unlike the relativism of German ethical school). In this way, economics maintained the Scholastic teleological dimension, developed a *normative* morality and focused on *real problems* of people because it did not separate facts from values (Solari, Corrado, 2009b). In other words, Tapparelli proposed a “common-sense-based” approach where economic theory and economic practice were “two sides of the same coin” (Livi, 1992).

Consequently, Tapparelli argued (1854a) that political economy is only a branch of political science because the creation of wealth is not a purpose *per se* but an instrument for reaching other goals. He referred to the responses to the material and spiritual needs that every human person naturally experiences in life. In Tapparelli’s view, the former can be judged through instruments of measurement of the achieved level of satisfaction whereas the latter can never be quantified for its intrinsic immaterial nature. Tapparelli rejected the Smithian epistemological idea, according to which the final target of economic science is the coordination of individuals’ selfish behaviours for the attainment of the total good of society.

²⁵⁰ The Latin original quotation is “*Veritas est adequatio rei et intellectus.*”

Conversely, he promoted a conception of economics as the discipline of human behaviours directed to the *common good* (Sandonà Lu., 2009). Tapparelli encouraged an integration of economics with morality in the awareness that common good concerns the *integral fulfilment* of every person and every human community (Rommen, 1945, p. 183). This adjective “integral” is particularly important because it indicates that the person’s fulfilment is connected to any aspect of human life, from affects to job, from leisure to rest. In this picture, Stefano Solari and Daniele Corrado highlighted that the “*theoretical definition of social justice is a true innovation of Tapparelli*” (2009c, p. 31). Solari and Corrado also pointed out that *social justice* is fundamental for the attainment of the common good because

for Tapparelli, just as for Aquinas, the common good is strictly related to the order of society (and of the economy) ... Justice has the task of connecting economics to the common good and is responsible for maintaining a teleological dimension in the study of political economy ... similarly to the Thomist idea, exchange is not the mechanical functioning of a market. Exchange is defined in a context of justice and therefore never clearly separable from charity. This aspect allows us to question the outcomes and the functioning of the price mechanism (relative to the common good). Similarly, the personality of interacting persons and reciprocity are reintroduced in social justice. Moreover, although authority represents an essential dimension of the economic order, no direct role of the state emerges in this perspective; no nationalisation of justice is allowed. Social justice is defined in the relationship between the person and the common good, not simply by political bodies

²⁵¹ The title of this work can be translated as the *Theory of Natural Law Based on Fact*.

representing the collectivity. In fact, Tapparelli is a forerunner in the theorisation of civil society, in that he continues to refer to the political community as a space in which true relationships between man and man are possible. (2009c, p. 33)

In fact, Tapparelli was one of the most important scholars to distinguish between a “commutative justice”, which is given its place in an exchange of particular goods between equals, and a “distributive justice”, which is connected to the balance of the “*proportions in the share of the common good*”²⁵² (Tapparelli, 1839, p. 146). Nevertheless, the former is not a mechanical functioning of the market because it is inseparable from charity and the reciprocity of human interactions founded on morality – the latter is firstly the output of the dynamism of a civil society characterized by the practice of civic virtues (Felice, 2008). In this view, the person’s human capital must basically flourish on the principle of *order*. Tapparelli stated:

*The good of man on earth, the supreme and only good, is order: order in the use of his individual faculties, the order of social relations.*²⁵³ (1854b, p. 257)

However, we must point out that Tapparelli’s concept of order is absolutely not the output automatically realized by a Smithian “invisible hand” of the market or by a socialist planning of an allocation of resources by the state. Instead, Tapparelli linked the order of society with the integral formation of a person’s human capital (Crespo, 2004). He referred to the human capacity of doling out human reason,

²⁵² The Italian original quotation is “*in proporzione della partecipazione al bene comune.*”

²⁵³ The Italian original quotation is “*Il bene dell’uomo sulla terra, bene sommo, bene unico è l’ordine: l’ordine nell’uso delle facoltà sue individuali, l’ordine delle relazioni sociali.*”

human moral convictions and human desires according to the *actual situation*. The nature of man is expressed by the integrated unity of senses and reason, so that man has a duty to conform himself and his appetite to the dictate of *reason* –which is his characterizing feature. For Tapparelli, behind human action there are not only material needs but also a variety of needs un-reducible to any superstructure (historicist or positivist). In this way, economics acquires a *practical* character because is not reduced to a complex of *a priori* theoretical statements of an equilibrium of forces but is directed to regulate human appetites using the person’s reason and her moral values. Human capital becomes decisive in shaping the *civic virtues*, whose concrete application actually changes in relation to the wide and diverse contexts of actual situations. In any case, Tapparelli argued that a human person is characterized by a “*natural human sociability*”²⁵⁴ (1839, p. 137), which leads her to live and develop within intermediate bodies (family, associations, groups, enterprises etc.). In the Christian community, the human person can meet the lively and personal presence of Jesus Christ behind the witnesses of the life of Christians (Tapparelli, 1852a and 1852b). For Tapparelli, when the human person meets Christ she discovers the face of the Thomist’s ultimate goal of reality.

4. Human Capital in Liberatore S.J.

Liberatore assumed Tapparelli’s epistemological framework in his assertions of political economy. In addition, the former introduced (1857) an economic method of analysis coherent with Neo-Thomist philosophy. He thus rejected the analytical instruments based on marginal utility, general economic equilibrium and so forth, by preferring a non-formalized approach grounded on the principles of the common good and a person’s dignity, solidarity and liberty. Liberatore published the book, *Principi di economia politica*²⁵⁵, in 1889, where collected his articles that had just appeared in the review, *La civiltà cattolica*. This book was translated into many

²⁵⁴ The Italian original quotation is “*naturale socievolezza umana*.”

²⁵⁵ The English version was published in 1891 with the title *Principles of Political Economy*.

languages and it caused interest everywhere. In fact, Liberatore went into some controversial aspects of economics, distinguishing himself from other scholars with a technical competence united with a strong theological preparation. He discussed topics regarding the theory of value, the factors of production, the division of labour and private property. However, Liberatore mainly examined human capital in his discussion regarding the *distributive justice* and the level of *workers' wages* (Turco, 2004).

For Liberatore (1866), *property* is a natural right, which can never be neglected. Nevertheless, property constitutes a secondary right deriving from the human right of *subsistence*. The right of property thus does not have an absolute character but a relative one. In fact, Liberatore believed that rich persons might feel the *moral duty* of giving a part of their wealth to alleviate pauperism. He proposed, on one side, the reinforcement of the human capital of all people from a ethical and moral point of view, and on the other, a taxation based on an embryonic form of the innovative principle of *subsidiarity* (Fitzgerald, 1957) –which Pope Pius XI's *Quadragesimo anno* (1931) officially introduced into Catholic social doctrine. Liberatore stated:

*Society can in no way accept part of the population revelling in opulence while the other part perishes in indigence*²⁵⁶ (1889, p. 211).

On the topic of salary, Liberatore emphasized the relevance of the *personality* of every worker. Although he recognized the efficiency of the division of labour, Liberatore proposed a continuous interchange of jobs among members of factories to avoid the degradation of the intellectual faculty of workmen performing repetitive tasks (Lombardi, 1982). With the same logic, he agreed with orthodox

economists regarding the measurement of human capital value, by taking account of the rules of the labour market but, at the same time, he added that it was not possible to deny that a person's work was constituted of human actions and it was thus not comparable to a machine's work (Dante, 2004). For Liberatore, a human person at work cannot be separated from his original ontology of being created in the image of God. Economics must thus, in Liberatore's opinion, avoid the risk of paying labourers less than what was necessary to allow them to live in *sufficient* social-economic conditions (Solari, 2010).

5. Human Capital in Pope Leo XIII

Pope Leo XII used a Thomist approach even to economic matters by trying to respond to the so-called social question. The working class was forced to work very hard and could not have any possibility of change. Children and women were employed in firms where human rights, such as a day of rest, were often denied. People experienced a painful pauperism and a miserable wretchedness (Furlog, Curtis, 1994). Their human dignity was neglected in nearly every aspect. In consideration of this negative situation, Pope Leo attacked the political and economic powers of his time by suggesting concrete proposals based on the flourishing of human capital (Murray, 1953). In the encyclical *Immortale Dei* (1885), he showed openness to *creative business innovation* by stating that the Catholic Church “*willingly and most gladly welcomes whatever improvements the age brings forth, if these really secure the prosperity of life*” (n.38). Pope Leo praised human intellect and industry and observed that Catholic teaching “*earnestly wishes that the talents of men may bear more and more abundant fruit by cultivation and exercise*” (ID, n. 39). Pope Leo was in favour of human capital growth intended as a creative business activity, with sound management, research and productive innovations that would serve humanity's well-being.

²⁵⁶ The Italian original quotation is “*La società non può in alcun modo patire che mentre una parte della popolazione gavazza nell'opulenza, un'altra perisca nell'inopia.*”

Indeed, Pope Leo XIII had previously emphasized the importance of human capital for the development of society in the *Quod Apostolici Muneris* (1878). Here, he had recognized “*the different power of body and mind*” (n.9) that exists among persons but had contemporaneously exhorted to develop the human capacity of entrepreneurship in the perspective of social justice for attaining the common good. On this point, in *Rerum Novarum* (1891), Pope Leo XIII identified in the moral orientation of human capital exploitation the decisive factor for realizing a society at the service of humankind. He wrote:

That which is required for the preservation of life, and for life's well-being, is produced in great abundance for the soil, but not until man has brought it into cultivation and expended upon it his solicitude and skill ... when man thus turns the activity of his mind and the strength of his body towards procuring the fruits of nature, by such an act he makes his own that of nature's field which he cultivates –that portion on which he leaves, as it were, the impress of his personality. (RN, n. 8).

In fact, Pope Leo XIII was aware that the spirit of cultural revolutionary change invoked by socialism and liberalism “*should have passed beyond politics and made its influence felt in the cognate field of practical economy*” (RN, n. 1). In fact, the liberalist and socialist theories proposed an anthropology according to which man conceived himself as the *maker* of his destiny (De Rosa, 2002). This distortion was always more augmented for the human invention of marvellous technological instruments and for the human discovery of much knowledge concerning the world's working. In Pope Leo XIII's view, this *Promethean anthropology* mainly shaped socialist ideology because it offered the wrong solution to the real problem of lack of social justice. Pope Leo XIII wrote that “*the main tenet of Socialism, the*

community of goods, must be utterly rejected" (RN, n. 12). In fact, a reduction of human society to only one level would be against the natural order. In fact, this utopian economic scenario of socialism would imply not taking account of the un-reducible character of human capital (Camacho, 1986). In God's plan, every person receives a specific *vocation* in life and work and she is endowed with some innate talents which transform into competencies and capabilities. Every person thus gives her contribution to the attainment of the common good according to her own modality. In the Pope's own words:

There naturally exist among mankind innumerable differences of the most important kind; people differ in capability, in diligence, in health, and in strength; and unequal fortune is a necessary result of inequality condition. Such inequality is far from being disadvantageous either to individuals or to community; social and political life can only go on by the help of various kinds of capacity and the playing of many parts, and each man, as a rule, chooses the part which peculiarly suits his case. (RN, n. 14)

On the other hand, the principle of property is also founded on the dignity of persons. Pope Leo XIII recognized the person's natural right to own material means as man makes choices and develops providence for his future in an attempt to improve the consistency and quality of his property. However, in Pope Leo XIII's view, property implies rights as well as *responsibilities*. As a consequence, those who have received a large share of temporal blessings, including the gift of mind and business activity, must "*employ them, as the steward of God's providence, for the benefit of others*" (RN, n. 22). The entrepreneur particularly represents a good figure in the human community if he uses his business talent for the common good. We can guess that Pope Leo had in mind persons engaged in economic affairs, such

as his friend Léon Harmel.²⁵⁷ In *Rerum Novarum*, the entrepreneur is a person endowed with a creative intellectual capacity to recognize productive opportunities and with an ability to pursue more effective ways of cultivating these opportunities for the service of others (Calkins, 2000). On the other hand, Pope Leo XIII indentified some urgent political reforms to carry out (Molony, 1991) concerning the reinforcement of labour unions and cooperative associations; the protection of the welfare of women and children; the determination of a just wage for the workers; the respect of dignity, health and the spiritual life of workers on the job. As human beings must be treated as human beings, not as objects, instruments, chattels or slaves, Pope Leo XII thought that some *institutions* of assistance were necessary for the poor and for the defence of the dignity of work. This *interclassist* cooperation is not only suitable from an ethical point of view but is even profitable in an economic sense because “*it may truly be said that it is only by the labour of working man that states grow rich*” (RN, n. 27).

6. Conclusions

The economic thought of the Neo-Thomist movement and of Pope Leo XIII re-proposed the Scholastic approach to economic matters. In this view, economics was not conceived as the science of the wealth of nations of the English classical school, and neither was it seen as the science of happiness of the Italian southern and northern schools. In fact, Tapparelli (1839) re-discovered the Aristotelian idea of political economy as a branch of political science. He promoted (1856) a vision of economics as a “practical science”, ethically oriented and aimed at the attainment of the common good. From Tapparelli’s perspective, ethics directly derives from the moral natural law, while man is a relational being capable of acting virtuously if

²⁵⁷ Léon Harmel (1829–1915) was a French textile manufacturer who led workers’ pilgrimages to Rome in 1885, 1887 and 1889. His show of working-class support for Catholicism and the papacy was welcomed by Pope Leo because it seemed to demonstrate that the Catholic Church represented a point of reference even inside workplaces. Harmel experienced the goodness of “patronage” and mutual help in his factories in Val des Bois and reported them in his 1879 *Manuel d’une Corporation Chrétienne* (The English title is *Handbook of a Christian Guild*).

he experiences the Christian faith. Tapparelli's entire philosophical structure was based on the principle of social justice, which represents his own innovation.

On his side, Liberatore introduced (1866) a method of economic analysis coherent with Tapparelli's philosophical framework by rejecting the mainstream approach based on the concepts of utility and general economic equilibrium. In fact, Liberatore preferred (1891) to advance an orientation of economic dynamics along moral channels. For example, he accepted the mechanism of demand and supply in the labour market but highlighted the employer's moral duty of never denying the dignity of every human person. This dignity implies a payment to every worker of a wage of an amount sufficient for a decent living. On the other hand, even von Ketteler's (1864) concrete proposals concerning the development of the labour organizations were aimed at defending the right of persons to be treated as human assets and not as material ones. Finally, we have analysed that in *Rerum Novarum* (1891), Pope Leo XIII pointed out that liberalism and (mainly) socialism are contrary to the moral natural law because they do not contain a personalist anthropology in their political economic theories. Pope Leo XIII praised the role of the entrepreneur in economic affairs, invited states to sustain the integral development of the personality of every worker and exhorted to empower the role of intermediate bodies in society.

In other words, for Neo-Thomist scholars and for Pope Leo XIII the final goal of all economic activities is the *common good* intended as the realization of the useful conditions for the fulfilment of every person and every human community. From this perspective, the growth of human capital was not exclusively viewed in terms of improving the efficiency of firms and the stability of society –although these aspects are not undervalued– but also for giving the possibility to every person of experiencing a good life through the meeting with the person of Jesus Christ risen again.

Chapter 3

Human Capital in Catholic Solidarism and in Popes Pius XI and Pius XII:

The Dawn of the “Third Way”

1. Introduction

The publication of Pope Leo XIII's *Rerum Novarum* was followed by a series of significant social and political initiatives (Gambasin, 1958), such as, in Italy, the growth of activities of *Azione Cattolica*²⁵⁸ and of the *Opera dei Congressi*²⁵⁹ as well as the successive foundation of the *Partito Popolare*²⁶⁰ by Father Luigi Sturzo in 1919. However, we can even identify some scholars who seriously tried to develop Pope Leo XII's social teachings in academia. They formed the school of thought called Social Catholicism, which elaborated a response to the social question grounded on a *solidarist* approach. For these scholars, solidarity does not mean the elimination of constitutive differences of persons' capabilities and proprieties (socialism) but the realization of social justice. They believed that social justice implies commutative and distributive justice but that it can never set aside reciprocal *charity* inspired by the Christian experience of faith.

In the first generation of this group, we can include Charles Antoine²⁶¹, Victor Brants²⁶², Giuseppe Toniolo²⁶³ and Heinrich Pesch S.J.²⁶⁴ (Passerin d'Entreves, Repgen, 1977). However, in our work we deeply examine only the figures of

²⁵⁸ The name of this organisation of the Church created in 1868 in Bologna can be translated into “Catholic Action”. The *Azione Cattolica* was directly managed by the bishops and was focused on the promotion of pastoral activities.

²⁵⁹ The name of this movement of the Church created in 1865 can be translated as the “Institution of Congresses”. The *Opera dei Congressi* was aimed at coordinating Catholic activities and applying Christian principles in any sector of the economy (Borla, 2005: 45).

²⁶⁰ The name of this party related to the Church can be translated into the “Popular Party”. The *Partito Popolare* was forced to close by Fascism and its members had to emigrate (Sturzo, Ferrari, Donati) or to renounce the exercising of any political and social activities (De Gasperi).

²⁶¹ Charles Antoine (1847–1921)

²⁶² Victor Brants (1856–1917)

²⁶³ Giuseppe Toniolo (1845–1918)

Toniolo and Pesch. The former did not found any school of thought in Italy, although Francesco Vito²⁶⁵ developed his theories (Parisi, 2008), whereas the latter headed up a group of German scholars, such as Gustav Gundlach S.J.²⁶⁶, Götz Briefs²⁶⁷, Wilhelm Schwer²⁶⁸, Paul Jostock²⁶⁹, Heirinch Rommen²⁷⁰, Theodore Brauer²⁷¹ and Oswald von Nell-Breuning S.J.²⁷² (Mueller, 1984). von Nell-Breuning was particularly important in the history of Catholic social thought because he personally wrote the draft of Pope Pius XI's *Quadragesimo Anno* (1931) encyclical letter which, in turn, significantly influenced Pope Pius XII's economic pronouncements.

2. Human Capital in Toniolo

Toniolo and Monsignor Talamo founded the *Rivista internazionale di scienze sociali e discipline ausiliarie*²⁷³ together (1893), which is still the official review of the department of economics at the Catholic University of Milan. Nevertheless, we have to point out that the imprinting of Talamo is deeply affected by Neo-Thomist thought. Alcide De Gasperi²⁷⁴ knew Vatican circles of intellectuals well because he was an employee at the Vatican library. In his *I tempi e gli uomini che prepararono la Rerum Novarum*²⁷⁵ he remembered that Monsignor Talamo “very often participated in discussions of encyclical elaboration” (1931, p. 78) in collaboration with the Neo-Thomist group of Liberatore and Cardinal Zigliara. In fact, Talamo had been a philosophy professor at the Apollinare, a pontifical institute in Rome,

²⁶⁴ Heinrich Pesch S. J. (1854–1926)

²⁶⁵ Francesco Vito (1902–1968)

²⁶⁶ Gustav Gundlach SJ (1892–1963)

²⁶⁷ Götz Briefs (1889–1974)

²⁶⁸ Wilhelm Schwer (1876–1949)

²⁶⁹ Paul Jostock (1895–1965)

²⁷⁰ Heirinch Rommen (1897–1967)

²⁷¹ Theodore Brauer (1889–1963)

²⁷² Oswald von Nell-Breuning (1890–1991)

²⁷³ The title of this review can be translated as the *International Review of Social Sciences and Auxiliary Disciplines*.

²⁷⁴ Alcide De Gasperi (1881–1954). He became the first leader of the Italian government after the Second World War.

since 1879, and became important for his elaboration of a theory of property by developing the Scholastic perspective. While Thomas argued that goods were created for the enjoyment and use of all persons and justified the division of goods by individual and family ownership in order to prevent evils and disorder (property as right of people), Talamo empowered (1878) this theory by adding the natural-law grounding of private ownership (property as a natural right).

Instead, Toniolo was a lay-economist and was totally independent from the Neo-Thomist movement in theories and in practical affairs (Tonin, 2007). He indirectly collaborated on Pope Leo XIII's *Rerum Novarum* encyclical letter through the mediation of his friend Stanislao Medolago Albani²⁷⁶, who was in contact with the *Friburg Union*. However, in 1891, Toniolo was quite young and was not very influential considering his no aristocratic origin²⁷⁷ (Trucco, 1966). In any case, at the end of the XIX century and at the beginning of the XX century, Toniolo promoted an important cultural work within the *Opera dei Congressi* and the *Federazione Universitaria Cattolici Italiani*²⁷⁸ (FUCI). Moreover, he gave a great contribution (1906) to the draft of the *Statuti di Firenze*²⁷⁹, promoted (1907) the *Settimane Sociali dei Cattolici Italiani*²⁸⁰, events that are still organized by the Italian Catholic Bishops Conference. Toniolo is undoubtedly one of the most original authors in the history of economic thought, capable of proving that morality constituted an *endogenous* element of economic dynamics. He only examined this topic in his 1873 first lesson at Padua University, whose title was *L'elemento etico come fattore intrinseco delle leggi economiche*.²⁸¹ In the light of

²⁷⁵ This book was translated into English as *The Times and the Men who Prepared "Rerum Novarum"*.

²⁷⁶ Stanislao Medolago Albani (1851–1921)

²⁷⁷ At that time the intellectuals of the middle class – more so if they were laypersons – were not praised by the hierarchy of the Catholic Church; as Antonio Rosmini's case also proved.

²⁷⁸ The name of this academic organization can be translated as the *University Federation of Italian Catholics*.

²⁷⁹ It deals with the constitution of Florence city. We can translate these papers as the *Statutes of Florence*.

²⁸⁰ The title of these cultural meetings can be translated as *The Social Weeks of Italian Catholics*.

²⁸¹ The title of Toniolo's first lesson can be translated as *The Ethic Element as Intrinsic Factor of Economic Laws*.

this awareness, Toniolo studied human capital in relation to economic epistemology, capitalism, socialism and political democracy (Molesti, 2005).

2.1 Toniolo's Human Capital and Economic Epistemology

Giuseppe Toniolo was an economist endowed with knowledge in sociology, religion, philosophy, politics and ethics (Da Persico, 1959). His approach to economic topics thus had an *interdisciplinary* character because in his view the human person cannot be reduced to the abstract paradigm of “homo economicus”. Indeed, Toniolo liked works of authors who belonged to the first German ethical economic school such as Wilhelm Roscher, Bruno Hildebrand, Frederic List and Karl Knies (Molesti, 2000) but even praised some of the treatises of English, French and Italian scholars (Are 1990, p. 25). Anyway, Toniolo personally admitted (1891) that his economic method based on statistics and economic history was inspired by the works of Luigi Cossa²⁸² and Fedele Lampertico²⁸³. Toniolo's approach (Toniolo, 1872) was even judged trustworthy by Francesco Ferrara (1874, p. 100), the most important Italian liberal exponent of Positivism of that time.

On the other hand, Toniolo rejected the conception of the German ethical school concerning human capital. He hardly contrasted Gustav von Schmoller's theory of the “spirit of people” related to the diverse historical and geographical contexts. For Toniolo, the “spirit of people” masked a relativistic and rationalistic imprinting. In his view, human capital affects with *practical ethics* in economic affairs, which substantially derives from the official moral teachings of the Catholic Church. Toniolo set forth that, even setting aside the Revelation, Christian ethics constitutes the best expression of rational ethics because it does not satisfy human base cupidity – differently to materialism, subjectivism and relativism. So much so that Cardinal Angelo Scola observed:

²⁸² Luigi Cossa (1789–1867)

²⁸³ Fedele Lampertico (1833–1906)

*Politics, economics, social organization demand an anthropology and, only then, an ethics. They cannot deny a conception of man and of social community. Ethics, in fact, emerges from anthropology and an adequate anthropology. For Toniolo it comes from the millenary tradition of the Catholic faith which for years nourished the Italian people. Faith actually does not represent an obstacle to scientific and social progress, instead it constitutes an important factor of development.*²⁸⁴ (2009, p. 8)

Toniolo believed (1886) that the human person is the efficient cause of productive processes and the leading actor of the economic world. The centrality of person in economics thus implies its *supremacy* over goods and over the accumulation of wealth. In other words, goods must always remain as the technical means and not the goals; instead, persons must always constitute the final goals and never as instruments. Toniolo's proposal was not so obvious in academia at the end of 1800 and at the beginning of the 1900s when socialist thought was much diffused. The economic determinism and mechanism theorised by Marx was supposed to create a perfect and equal society by cancelling the innate spiritual needs of the people. Marx exclusively focalized his theory on political objectives of social justice, whereas Toniolo argued for the supremacy of ethical-social and ethical-economic purposes related to *social, distributive and commutative justice* together (Bernareggi, 1943).

²⁸⁴ The Italian original quotation is “*La politica, l’economia, l’organizzazione sociale domandano, prima ancora che un’etica, un’antropologia. Non possiamo fare a meno di una concezione dell’uomo e della comunità sociale. L’etica, infatti, si dà solo dentro un’antropologia ed un’antropologia adeguata. Essa per Toniolo fiorisce nel tronco millenario della fede cattolica che per secoli ha alimentato il nostro popolo. La fede infatti, lungi dal rappresentare un ostacolo al progresso scientifico e sociale, ne costituisce una molla efficace di sviluppo.*”

2.2 Toniolo's Human Capital and Capitalism

Toniolo (1893) developed the genesis of capitalism during the pre-Reformation period as being characterized by a *rationalist* mentality. Lorenzo Valla²⁸⁵, Niccolò Macchiavelli²⁸⁶ and Erasmus of Rotterdam²⁸⁷ promoted an *anthropocentric* conscience where the relation between the human person and God was neglected. They exclusively identified in the human capacities the key of economic development by missing the role of Providence in history. In Toniolo's opinion, this *neo-humanism* was a consequence of a new twisted Christian spirituality which denied the intermediate task of the Church in the relation between the believers and God. Therefore, Toniolo did not agree with Marx's (1885) thinking that Protestantism was the epiphenomenon of the economic phenomenon; additionally, he rejected his pupil²⁸⁸ Werner Sombart's²⁸⁹ introduction of the word "capitalism" (1915) for referring to the beginning of a new disease of bigger production due to the industrial revolution and –like in Max Weber's view (1904–1905)– to the diffusion of Protestantism. For Toniolo (1882), the increase in the level of material well-being was not related to a new mentality, because even in the Middle Ages, such as in Florence, there was the spirit of constructing an efficient economy. However, economic development was not possible during the medieval age because the Catholic Church introduced some market barriers, such as the condemnation of monopolies, of speculative trade and of loans and interest. In fact, Sascha Becker and Ludger Woessmann proved (2009) that the correlation between Protestantism and economic success was not due to a new ethic but to Calvino and Lutero's encouragement of teaching *elementary literary skills* to common people to read the Bible directly. This growth of human capital in society was the real factor of wealth growth in Protestant countries (Delacroix, Nielsen, 2002). On the other hand, Toniolo had just advised (1907) that the profit centrality of capitalism could risk compressing the centrality of man's role in the economic world. He was especially worried about the

²⁸⁵ Lorenzo Valla (1405–1457)

²⁸⁶ Niccolò Macchiavelli (1469–1527)

²⁸⁷ Erasmus of Rotterdam (1466–1536)

²⁸⁸ In fact, Sombart attended Toniolo's lessons on economics and statistics at Pisa University from March 19th until May 31th (Pecorari, 1986: 46–67).

²⁸⁹ Werner Sombart (1863–1941)

low consideration given to *intermediate bodies* where the human person learns how to live and develops her social relations. Indeed, within family, associations and groups the human being tries to respond to the innate demands of his heart regarding the meaning of life, of pain, of death, etc.

Secondly, Toniolo observed that in Central-European countries, the Reform was accompanied by the elimination of Catholic social charitable institutions in favour of individuals' accumulation of richness. He pointed out that the reason was related –as Amintore Fanfani²⁹⁰ successively confirmed (1934) in *Cattolicesimo e Protestantismo nella formazione storica del Capitalismo*²⁹¹– to the substitution of the concept of the common good with that of total good (Taviani, 1967). In fact, Toniolo compared (1888) the Christian Middle Age vision of society with the pagan Roman one. He concluded that the first was better than the second because it was founded on principles of *liberty* and *authority* within a structure of society composed by intermediate bodies, rather the latter, that was based on a state's force and slavery because it was grounded on a selfish anthropology. As an analogy to Roman philosophy, the Protestant culture usually shapes a type of society characterized by conflict and hate among people. Toniolo thus experienced nostalgia for the Middle Age society characterized by actions of gifts, reciprocity and goodness (Todeschini, 2002) at the point that Thomas Nitsch used the metaphor of an organism in properly describing Toniolo's examination of a “*social system at large and its various subsystems in terms of their 'constitutions' and the interplay among those component parts*” (1993, p. 14).

In conclusion, Toniolo thought that the paradigm of man as an individualist and selfish being was linked to a depersonalized vision of society where the identity and history of every individual were not considered. The run of interest maximization inspired by the capitalist mentality embodied the temptation of interpreting all life from a deterministic and materialistic viewpoint. Therefore, in 1907, in *L'eredità di Leone XIII*²⁹², Toniolo argued as to the fairness of the Aristotelian-Thomist paradigm of man

²⁹⁰ Amintore Fanfani (1908–1999)

²⁹¹ This book was translated into English as *Catholicism and Protestantism in the Historic Formation of Capitalism*.

²⁹² The title of this work can be translated into *The Heritage of Leo XIII*.

as *social being*, which had only recently been promoted in an efficacious way by Saint Bernardino of Siena²⁹³ (1427) and blessed Bernardino of Feltre (1493).

2.3 Toniolo's Human Capital and Socialism

The socialist concept of a perfect social justice on the Earth never touched on Toniolo's thoughts (1895–1896). Toniolo was always aware that conditions and situations of inequality were ineradicable, because society was composed of human persons who were marked by original sin, but he was seriously engaged in fighting the problems of the “social question”. In this regard, he considered collectivism as constitutively against the Christian natural order of society because it violated the person's *dignity*. Collectivism does not take account of the principles of *freedom* and *commutative justice* and destroys the *primacy* of moral and ethical values for economic and financial ones. Regarding this, the *Unione Cattolica per gli Studi Sociali*²⁹⁴ (Toniolo, 1893) guided by Toniolo wrote (1894) a *Programma dei cattolici di fronte al socialismo*²⁹⁵. In this document, the signers stated:

We refuse even the name of Catholic socialists that some people sometimes attributed to us, because Socialism is the intrinsic negation of Christianity, and its program is antithetic to ours. Socialism is atheist whereas we are religious; it ruins individual property whereas we want to defend and to emphasize it; it wants to revolutionarily destroy whereas we want to rebuild the hierarchical order of society and consequently the just freedom, the proportional equality, the solidarity in the goals of civil living. We do not admit anything either to a social “New-

²⁹³ Bernardino of Siena (1380–1440)

²⁹⁴ The name of this organization can be translated as the “Catholic Union of Social Studies”.

Christianity”, vague and misleading, which disfigures true
Christianity (Toniolo, et al, 1894, p. 173)²⁹⁶.

In addition, for Toniolo, the division of society into classes and the elimination of personal property advocated by socialism constituted elements in total opposition with Christian concepts of human capital founded on the principles of *voluntarism* and *responsibility* (Pecorari, 1981). In fact, from 1898–1913 in the *Trattato di economia sociale e di scritti economici* Toniolo explained that the desirable social function of goods justly needs the exercise of personal liberty and cannot be forced by public power. Otherwise, man would miss the subjective dignity related to liberty becoming a simple element of a supposed aggregative reality. Therefore, Toniolo thought (1900) that the point was firstly an *integral upbringing* of all persons indifferently from their social class. In his opinion, the acquisition of good *ethical values* and the practice of *civic virtues* give way to a free and spontaneous interaction of economic agents aimed at the common good. In this picture, the state has only to play according to an embryonic concept of subsidiarity by interfering in economic matters when society is not capable alone of realizing the common good. On the other hand, Toniolo had just argued (1871) that private property had to be divided into many owners in order to avoid monopolistic businesses and latifundia, besides stimulating many persons to participate directly in the economic risk of enterprise in small and medium firms as well as in agricultural activities. Along the same lines of thinking, he had just encouraged (1874) workers’ representation in the management of firms to achieve enterprise’s better economic

²⁹⁵ The denomination of this paper can be translated in English as “The Programme of Catholics in front of Socialism”.

²⁹⁶ The Italian original quotation is “*Respingiamo fin anche il nome di socialismo cattolico che talvolta ci si attribuisce o rinfaccia, perciocché il socialismo è la negazione intrinseca del cristianesimo, e il suo programma è l’antitesi del nostro. Il socialismo è “ateo” e noi siamo religiosi; esso atterra la proprietà particolare, e noi vogliamo rinfrancarla e diffonderla; esso è distruttore, noi vogliamo ricostruire l’ordine gerarchico e per esso la libertà legittima, l’eguaglianza proporzionale, la solidarietà negli intenti finali del vivere civile. Nulla concediamo nemmeno ad un nuovo “neocristianesimo” sociale, vaporoso e ingannevole che del cristianesimo è una sfigurazione.*”

results in terms of productivity and profits²⁹⁷. Finally, Toniolo distinguished (1908, 1911) himself from other exponents of the *Opera dei Congressi* (Tramontin, 1990), who all maintained the constitution of “mixed syndicates”, i.e. contemporaneously composed of employees and employers. In fact, he was favourable to a constitution of syndicates composed of only workers, as socialist organizations invoked, so as not to nourish an ideology of class struggle in workers. Toniolo proposed a *balanced combination* of the search of the innate individual interest of every economic worker (man as an individual being) with the innate *intra-classist* human solidarity (man as a social being) and, in a second step, the attempt of an *interclassist* agreement inspired by social justice.

2.4 Toniolo’s Human Capital and Political Democracy

The economic proposal of a “third way”, theorised by Social Catholicism, needed a political system capable of maintaining stability and peace in society. Toniolo suggested (1899) that *political democracy* was the model more representative of people’s wants and more apt to pursue the common good. It dealt with a great novelty in that time (Tramontin, 1973). Toniolo described political democracy as:

*That civil system, in which all social, legal and economic forces, in the fullness of their hierarchical development, cooperate proportionally for the common good, finishing with a result that mainly benefits the lower classes.*²⁹⁸ (1897, p. 329)

²⁹⁷ In Toniolo’s roots, Romano Molesti recently identified (2006b) a lot of forms of business administration partnership, such as preferred sharing, gain sharing, profit sharing and labour capital sharing.

²⁹⁸ The Italian original quotation is “*Quell’ordinamento nel quale tutte le forze sociali, giuridiche ed economiche, nella pienezza del loro sviluppo gerarchico, cooperano proporzionalmente al bene comune, rifinendo in ultimo risultato a prevalente vantaggio delle classi inferiori.*”

Toniolo thus emphasized the substantial social aspect of democracy in contrast to the simply formal and procedural political one. He argued for this primacy because the political order would have lacked in meaning and effectiveness if *civil society* was not the principal actor of economic dynamics (Pecorari, 1991). Civil society is, in turn, the practical exploitation of the human capital of people. Toniolo thus promoted (1897) an architecture of society divided into associations, groups and medium-small enterprises; an electoral system based on proportional representation of parties; a referendum of people initiatives; a protective legislation for work; support for agricultural activities; a reinforcement of the education and formation system; a federalist and solidarist taxation; a reduction of bureaucracy costs; a guarantee of political and civil liberties (of speech, of teaching, of religion etc.); a fraternity relationship with other countries; the elimination of usury and speculative financial activities; a diminished military cost and a progressive general disarmament. Therefore, in Toniolo's mind, democracy was only an instrument to allow for the flourishing of the *creative subjectivity* of every human person as well as of intermediate bodies (Ardigò, 1978, p. 27). In fact, Stefano Zamberlan pointed out that through "*the political participation, the social emancipation and economic justice*" (2009, p. 260) Toniolo believed in approaching people with the Gospel message of Redemption. Human salvation was never intended as a social aim by Toniolo, but as something given by divine grace (Sorrentino, 2001). Nevertheless, Toniolo did not have a Gnostic spirit and so recognized that a person endowed of a decent social position better focalized spiritual needs than another one receiving an insufficient wage. As a consequence, Toniolo observed (1913) that people of his time did not understand the entire value of the salvation promise contained in Christian fact because they were too worried by having to face the struggle of meeting the basic material needs for living.

3. Human Capital in Pesch S. J.

After the attainment of a law degree, Pesch entered into the Jesuit order and started to study theology in England for four years. This period was decisive for his taking

up research in economic matters. In fact, Pesch personally saw the miseries of the working masses and recognized the urgent necessity of changing the social scenario (Ederer, 1993). Returning to Germany, Pesch was sent to serve as spiritual director in the Mainz seminary. He chose the von Ketteler's former home to live in. Here, Pesch could read many papers of von Ketteler and fully agreed with the Church's rejection of socialist theories as well as its strong perplexity towards liberalist ones. In fact, from the 1905–1926 *Liberalismus, Sozialismus und christliche Gesellschaftsordnung*, Pesch developed Pope Leo XIII's (1891) *realist* approach to economics based on the Aristotelian-Thomist anthropology and his conception of economics as a branch of political science useful for the attainment of the *common good*. In Pesch's view (1917), the human being is conceived as being composed of a whole body-soul and the economic analysis is inserted within the study of all practical aspects of a person's social life (Mulcahy, 1952). For this reason, Stefano Solari thinks that Pesch represents the scholar "*who proposed the most developed work in Social Catholicism*" (2010, p. 106).

3.1 Pesch's Human Capital and the Economic Epistemology

Pesch was aware of the impossibility of solving every economic problem existing on the Earth as well as of realizing an economic architecture capable of making people happy. He thus powerfully contrasted utopian political projects of his era because he believed that every person fulfils herself (becomes totally happy) only when she understands the ultimate truth of reality in the meeting with the presence of Christ risen again. In this regard, in the 1905–1926 *Lehrbuch der Nationalökonomie* Pesch stated:

Still even from the relatively best organization of economic life no paradise can be expected. Considering the weakness of men and the inadequacy of all models, flaws will always arise. The

*ideal of a theory is hardly completely realized, and even the programs of practical economic policy are no magic formulae, even if they move along the propter path.*²⁹⁹ (vol. 4, p. 587)

Pesch argued that Catholicism proposes no economic system but gives a philosophical and ethical ground on which the economic instruments and the economic policies might be articulated. He exalted the *personality, liberty* and *dignity* of every human being and promoted a *vocational order* of society founded on civic virtues, social justice and charity (Harris, 1946). Nevertheless, Pesch's framework somehow wanted to shape the presuppositions for the construction of an economic system called the "third way", as an alternative to socialism and to unlimited liberalism (Mueller, 1951–1952). Indeed, Pesch explained that socialism and liberalism imply normative considerations even if they do not express them. On the opposite pole, Pesch held that Catholic values and goals need to be expressed in the new economic theories aimed at the attainment of the common good. He thus refused to separate economics as a science from economics as policy and as an art. This does not mean that Pesch confuses economics with moral theology. In his opinion, economics is a *practical science* which needs to be ethically oriented. As a consequence, for Pesch the moral theologians must describe an architectural sketch for building an economic order rather the economists must set detailed blue-line drawings (Possenti, 2001). Pesch clarified his economic epistemology in the following example:

Medieval scholasticism, as well as present day moral philosophy and moral theology, deals with the facts of economic life from a moral point of view. That is not the job of the economist. He will not, of course, oppose the demand of ethics, but neither will he lose sight of the fact that economics has become a (relatively)

²⁹⁹ We do not know the German and we thus read this work in the English translation.

autonomous science, which treats of the economic life of nations from a viewpoint different than of ethics. The decisive viewpoint of the latter is that of moral goodness, while for economics is that of national prosperity. The material object may be partially the same for both, but their respective formal object definitively differs and that is why they are to be regarded as independent sciences. (quoted in Mueller, 1951, p. 151-152)

Pesch maintained that it was appropriate to place economic thought within a context larger than that of wealth, productivity, welfare and price (Sen, 1987). All economists must own the knowledge of ethics and morality and confront theologians for suggestions regarding economic instruments that are proper to defend the un-reducible dignity of the human capital of every person. In fact, Pesch set forth that without *honest work, honest dealings, cooperative attitudes* and other virtues, the economy could not work efficiently. On the other hand, Pesch conceived human capital as a series of moral values and practical habits connected to an *ordered* structure of society (Grimmer-Solem, 2000). He understood the duty of communicating to all people the symbiotic character of society working because every part of it is interdependent with the others as in a lively organism. In this way, human freedom is not neglected but exalted because social order guarantees the exercise of liberty. Peter Koslowski observed (2000) that from Pesch's perspective, if economists openly state those moral requirements of people which are fundamental for the implementation of their own systems, we would find that these moral requirements would always coincide with the behaviours inspired by the Christian faith. Therefore, the point is to stimulate the determination of a *hierarchy* of social values where the spiritual ones lay on the top.

Nevertheless, Pesch pointed out that:

Religion cannot produce grain; it cannot do away with physical ills. Morally advanced peoples will, no doubt, profit economically from the active, especially the social, virtues of their citizens and will be better prepared to endure physical evil and hard times. But this does not mean that the economist should theologize or moralize in the treatment of his subject matter or, what is worse, try to derive an economic system from the Holy Scripture. (quoted in Mueller, 1951, p. 152)

We can affirm that Pesch appears as a wise thinker because he resisted the temptation of rejecting economic science as an immoral discipline –as many priests still do today– or worse, of changing the substantial postulates of economic science. On the contrary, he demonstrated that economics constitutively incorporates ethics, even if those ethics are explicitly expressed or not (Lombardini, 1983). We actually know that even the ethics of supposed neutrality in the economic mainstream are usually certificated by *assumptions*, such as the “preferences” of economic actors and the curves of indifference of consumers. But, Pesch would ask, perhaps these assumptions do not presuppose any ethical reference? We guess that the ethic conviction is that the scientific truth is exclusively something demonstrable according to mathematical logic. However, this affirmation is, in itself, an ethical statement because it excludes that which is codifiable in mathematical terms as untrue. For example, a mother who loves her daughter is not quantifiable but that does not mean that is false. Therefore, we must ask what the better ethical choice for economics is. In Pesch’s view, the ethics more apt to economics are those drawing from Catholicism because Christian anthropology describes the nature of man better than any other anthropology. As a consequence of this, Pesch exhorted – differently to Toniolo– avoiding the nostalgia for the medieval guilds and operating, instead, in order to return “*to the eternal laws of Christianity*” (1905–1926, vol. 3, p. 547). His proposal is substantially a new “*Christianization of the economy through the Christianization of people*” (1905–1926, vol. 3, p. 547).

3.2 Pesch's Human Capital and Solidarism

The “third way” was elaborated on as an alternative economic theory to both socialism and liberalism. At the beginning, the solidarist “third way” was outlined by Frederich Bastiat³⁰⁰ (1850), proposed by Donoso Cortès³⁰¹ (1851), and invoked by Pope Pius XI's *Sillabo* –this was the appendix of his 1861 *Quanta Cura* encyclical letter. However, Pesch clearly developed the theory in a *microeconomic* perspective by setting forth that in daily interchanges, human beings are deeply affected by the socio-cultural climate where they live. He believed that no one can properly understand the daily choices made in family, life, politics and in economic transactions without grasping the ideal and moral impulses which suffuse them (O'Boyle, 2007). Consequently, the importance of *human community* is decisive for the quality of the human capital of every member of that community (Danner, 1984). In an Aristotelian-Thomist tradition, economics thus might direct its efforts to promoting the common good of society. To attain this purpose, Pesch pointed out that the determinants of success are the respect of the moral natural law in every human action and the valorisation of an *organic* and *ordered* vision of society. He thus corrected Smith's definition of wealth by stating:

To the prosperity of the nation appertains the permanent providing of the material means sufficient, in accord with the requirements of a progressive culture, for the satisfaction of the expanding wants of a nation increasing population, so that along with a rather larger number of moderately wealthy persons, an extensive and capable middle class will be maintained, a living at least worthy of human dignity and corresponding to the degree of culture attained will be secured for all the members, even the lowest classes, permanent poverty

³⁰⁰ Frédéric Bastiat (1801–1850)

*remaining excluded—all of this, at the same time, with the protection of the higher values of the person, the family, the political society.*³⁰² (1905-1926, 2 vol., p. 316)

Pesch rejected liberalism because he recognized that naked competition is not possible for the *inequality* of the initial conditions of human capital endowment: all persons do not have the same character, health, history, talent, family etc. (Mulcahy, 1949). On the other hand, Pesch believed that indolence, indifference and narcissism of human persons cause the collapse of society through incompetence, corruption and ethical disorder (Manzone, 2001). On the contrary, persons' honesty, friendship, reciprocity and trust concur to the attainment of the common good of society. The solidarist approach was thus grounded on the principles of human competences, civic virtues and moral behaviours.

Finally, Pesch gave some practical suggestions, such as the valorisation of *intermediate bodies* (family, groups, associations); the reinforcement of *cultural institutions* aimed to diffuse the sense of community, spiritual values and ethical mandates; the support of *mediating political institutions*, such as labour organizations, small and medium enterprises based on private property and regulative authorities of markets; and the promotion of a state's interference in markets according to an embryonic form of the principle of *subsidiarity* (Rommen, 1945). In fact, Michael Novak³⁰³ observed (2005³, p. 69–80) that Pesch thought that these intermediate institutions have an autonomous *creative subjectivity* and influence the formation of persons more than human reason itself does. They actually shape, in so many suitable ways, the manner in which persons imagine, perceive, inquire and reflect. In other words, they significantly contribute to

³⁰¹ Juan Donoso Cortès (1809–1853)

³⁰² We do not know the German and we thus read this work in the English translation.

³⁰³ Michael Novak (1933–)

supplying the *unconscious mental patterns* of persons on which the construction of human capital occurs.

4. Human Capital in Pope Pius XI

Pope Pius XI³⁰⁴ led the Church between 1922 and 1939. This was a very difficult political and economic period: Benito Mussolini³⁰⁵ and Adolf Hitler³⁰⁶ imposed their totalitarian dictatorship, respectively, in Italy and in Germany, while the Communist power was always more established in all countries of Eastern Europe. In 1929, the financial market of Wall Street crashed into a deep depression. In the middle of this historical crisis point, and on the occasion of the anniversary of *Rerum Novarum*, Pope Pius XI wrote *Quadragesimo Anno* (1931). Here, he addressed an invite to all people, especially to political leaders, to rebalance the economic situation concerning the respect of the *human dignity* of every person and the defence of elementary human rights. From this perspective, we must remember the noteworthy official introduction of the *subsidiarity principle* in Catholic social doctrine (Occhetta, 2001; Vittadini, 2007). Pope Pius XI conceived subsidiarity as the pillar on which to found the economic system called the “third way”; an alternative to both collectivism and liberalism (Quadrio Curzio, 2002). He stated:

The supreme authority of the state ought, therefore, to let subordinate groups handle matters and concerns of lesser importance, which would otherwise dissipate its efforts greatly. Thereby the state will more freely, powerfully, and effectively do all those things that belong to it alone because it alone can do them: directing, watching, urging, restraining, as occasion

³⁰⁴ Ambrogio Damiano Achille Ratti (1857–1939)

³⁰⁵ Benito Mussolini (1883–1945)

³⁰⁶ Adolf Hitler (1889–1945)

requires and necessity demands. Therefore, those in power should be sure that the more perfectly a graduated order is kept among the various associations, in observance of the principle of "subsidiary function," the stronger social authority and effectiveness will be the happier and more prosperous the condition of the State. (QA, n. 80)

Franz Mueller confidently deduced (1964, p. 132) that when writing the *Quadragesimo Anno* encyclical letter, Pope Pius asked the Jesuit General to request that one of the German Jesuits, who was taking part in regular meetings on the social question (Crispoliti, 1935), be appointed to prepare a draft in total secrecy and without consultation with others. The Jesuit General chose for the task Oswald von Nell-Breuning S.J., who was Pesch's pupil and taught social thought and economics at Frankfurt University. In his 1931 line-by-line commentary on the encyclical, von Nell-Breuning set forth the novelty in Catholic social thought of Pope Pius XI's proposal of a *vocational order* in society intended as a way to meet the full flourishing of innate talents and working desires of every person. In fact, *Quadragesimo Anno* described human capital as the key of economic development. In the text, human capital is conceived as the set of human capabilities which are applied in a *creative* business process. As persons are the principal actors of the economy because they really make possible material production, Pope Pius XI constantly repeated that economics presupposed *ethics* and ethics derives from *anthropology*. The economic activities of every person and of the whole society thus need an adequate anthropology because

the capacities of human body and mind determine the limits of what productive human effort cannot and of what it can attain in the economic field. (QA, n. 42)

Indeed, Pope Pius XI stated that wealth cannot be created

unless mind, material things, and work combine and form as it were a single whole. (QA, n. 69)

As a consequence of this, Pope Pius XI emphasized the responsibility of entrepreneurs and managers for the attainment of the common good. They have to diligently use the “*time and energy of body and mind*” (QA, n. 57) of their subordinated collaborators as well as renounce financial speculation, which causes a conflict of interests between their positions and the development of the fraternal climate of the workers’ community. Pope Pius XI believed that economic employers have some moral duties, such as to provide employment, pay workers a just wage, foster a community of work and create useful products and services. For Pope Pius XI, those who were endowed with a high human capital must use it for the integral development of himself and of others. In fact, *Quadragesimo Anno* strongly re-proposed the Thomist topic of a person’s virtue of munificence (QA, n. 53), intended as the attitude of “*doing some great work*” (Thomas, *Summa Theologiae*, IIa-IIae, q. 134.2) by developing the person’s innate talents as well as acquired knowledge and abilities.

5. Human Capital in Pope Pius XII

Pope Pius XII³⁰⁷ never issued a social encyclical but he made significant contributions to Catholic social thought in his 1,350 addresses and allocutions (Riccardi, 2003). His speeches and radio addresses drew on the teachings of *Rerum Novarum* and *Quadragesimo Anno* and showed an enduring interest regarding human capital. In an address to small-business managers, Pope Pius XII linked entrepreneurship with economic progress by praising the “*remarkable progress*” (1956, p. 50) of the human community deriving from the invention of new products and the improvements of

³⁰⁷ Eugenio Maria Giuseppe Pacelli (1876–1958)

production processes. He thus reinforced the tradition of Catholic social thought according to the supremacy of labour factor over the capital one.

The moral character of economic activity was significantly highlighted by Pope Pius XII, especially referring to persons who take important decisions concerning business dynamics. They might make precise valuations about potential market opportunities and respond to changing market demand by discovering new ways of doing things, by communicating a decisive driving force, by transforming methods of production or by increasing the efficiency of machines, but they also have the *moral responsibility* to struggle against the destitution of the populace (Pope Pius XII, 1957). For this reason, Pope Pius XII told entrepreneurs and managers:

Marks of technical qualification and of adaptability to the demands of the consumer impress their requirements on the structure and the development of your enterprises. We should like to stress at this point the necessity for management to possess the qualities of true leadership ... this calls for a man in whom the most varied intellectual gifts are united to a strong and versatile character. (1956, p. 50-51)

On the other hand, Pope Pius XII acknowledged that business activities can develop only if they are supported by banks' assistance. Consequently, he exhorted bankers to sustain "*the institutions which are destined to promote individual initiatives or small enterprises*" (1955, p. 44). In Pope Pius XII's view, bankers must mainly make financial capital available for the fulfilment of economic activities which respect the human dignity of workers and create new jobs, while firms are responsible for the "*services rendered to the national community*" (1956, p. 50), which imply the rejection of a business ethics based on selfish interest. On the other hand, the human capital of employees might be to the service of the coordination of entrepreneurs and managers.

These employees are called to participate in a *privileged* way to the formation of the common good. As the parable of the Gospel teaches (Matthew, 25: 14-30), who have received more talents must more yield them. In conclusion, for Pope Pius XII the moral aspects of human capital can help to realize a human community of peace and justice.

6. Conclusions

At the end of the XIX century and the beginning of the XX century, Pope Leo XIII's teachings were developed by many authors, mainly belonging to the school of thought called "Social Catholicism". From this viewpoint we can observe a significant introduction into the economic debate concerning the consideration of the human being as somebody endowed with their own *un-reducible dignity* rather than a mean or an input of production processes. In fact, the centrality of workers' conditions constitutes the presupposition for the elaboration of these authors' theories. Man is conceived as the principal actor of economic dynamics and at the same time as the final goal for which the economy must work.

However, we have limited our analysis to two of the most significant figures of this movement: Toniolo and Pesch. The former was an economist endowed with an interdisciplinary approach based on economic history and statistics. He was capable (1873) of demonstrating the *inseparable link* between economics and ethics and between ethics and anthropology. He set forth (1888) that for an *integral flourishing* of human capital of all persons an *organic vision* of society was necessary such as that of the Medieval Ages. In fact, for Toniolo (1893), the capitalist theories imply an anthropocentrism which excludes the role of Providence in history. Capitalism actually adopts the paradigm of "homo economicus" in the individualist self-made man version, while Toniolo conceived (1907) man as a social being who fulfils himself in the Christian experience. Moreover, Toniolo pointed out (1888) that the capitalist principles of efficiency and productivity cannot risk practically discussing the human dignity of every person. Rather, Toniolo radically refused (Toniolo, et al, 1894) socialism because it neglects the natural liberty of every human being as well as the creative subjectivity

of the intermediate bodies. In his view (1898–1913), the principle of *social* justice must always be related even to the principle of *commutative* justice and *distributive* justice. Finally, Toniolo argued (1897) that an architecture of society aimed at the common good needs a democratic political system. This constituted a great cultural novelty in that temporal point.

Pesch presented an approach that was more theological and epistemological than Toniolo's. He clearly distinguished (Pesch quoted in Muller 1951) between the role of Catholic theologians and that of Catholic economists by inviting the creation of a constructive dialogue among them. In fact, Pesch focused on the fact that any economic theory incorporates some philosophical social principles, although it does not openly express them. As a consequence, Pesch believed (1905–1926) that Pope Leo XII's idea of a "third way" –an alternative both to liberalism and to socialism– cannot be structured on the basis of nostalgia for the Middle Ages society. On the contrary, he suggested a new economic pattern adequate for the changed times and at the same time a trust in the eternal Catholic principles of solidarity, friendship, reciprocity and subsidiarity. This last principle was officially included in Catholic social doctrine through the publication of the *Quadragesimo Anno* (1931) encyclical letter. Here, Pope Pius XI invited the political leaders to avoid conflicts among countries and exhorted employers and employees to collaborate within firms in an attempt to attain the common good. In the same inter-classist direction, Pope Pius XII addressed speeches to bankers (1955), managers (1956) and workers (1957) where he repeatedly affirmed the *primacy* of the labour factor over the capital one in the production function. He particularly highlighted the necessity of entrepreneurs' *morality* in their role of coordination of material and human resources.

Chapter 4

Human Capital in Community Personalism and in Pope John XXIII and Pope Paul VI: An Integral Anthropology

1. Introduction

In this chapter we examine the important contributions of Cardinal Pavan, who was the ghost writer of Pope John XXIII's social encyclicals. Although his role in Catholic social thought was often unjustly undervalued, we will demonstrate that he was one of the leading figures of the Church regarding the argumentations in favour of political democracy and economic personalism (Sandona Lu., 2010c). On these topics Vito also wrote relevant papers and books. In fact, he strictly collaborated with Cardinal Pavan within the assembly of *Settimane Sociali dei Cattolici Italiani* during Pope John XXIII's pontificate. Moreover, Vito shaped the mind of Pope Paul VI in economic matters when the former was the Rector of the Catholic University in Milan and the latter was the Archbishop of Milan.

However, in Pope Paul VI's *Populorum Progressio* (1967) we can mainly identify the significant influence of Maritain's community personalism. The school of French personalism was formed around the review "Esprit", which was founded in October 1932. This journal has an intellectual character but was accessible to the non-academic public. Emmanuel Mounier, the founder and director of the review, basically gave a Catholic imprinting to the issues but he also carried articles of Protestant, Israelite and Buddhist scholars. Victor Serge³⁰⁸ and Boris Souvarine³⁰⁹ also collaborated with their liberal revolutionary theories. For this reason, "Esprit" was recognized as an open space of cultural confrontation. However, Esprit mainly promoted the personalist philosophy, which appeared as the only hope in the face of the 1929 economic crisis which destroyed a lot of wealth and reduced the numbers

³⁰⁸ Victor Serge (1890–1947)

³⁰⁹ Boris Souvarine (1895–1984)

of jobs. Nevertheless, in the personalist movement we can distinguish at least two schools of thought: the existential personalism of Nikolaj Aleksandrovič Berdjajev³¹⁰, Paul-Ludwig Landsberg³¹¹, Maurice Nedoncelle³¹², and Paul Ricoeur³¹³ and the community personalism of Mounier, Maritain, Jean Nabert³¹⁴, René Le Senne³¹⁵, Gabriel Madinier³¹⁶ and Jean Lacroix³¹⁷. We exclusively analyse community personalism because this framework was largely accepted in Catholic social thought and in the social teachings of Pope Paul VI.

In this regard, from a historical point of view, we must remember that in August 1924 the young priest, Giovanni Battista Montini, went to Paris to improve his cultural preparation. Here, Joseph Coppens³¹⁸ (1978) remembered that Montini read many works of French literature and personally became a friend of Maritain and Jean Guitton³¹⁹. Montini maintained these relations throughout his life. In fact, although Maritain criticized the insufficient change in the works of the Second Vatican Council, he was directly invited in that period as well as on successive occasions as an unknown guest in the sacred palaces by Pope Paul VI (Cauliff, 2010). In fact, Jean-Luc Barré deduced:

Paul VI receives who judges his master “with an exceptional goodness and affection”—Maritain observed. Paul VI and Maritain embraced each other. Paul VI said to be happy for the only fact that Maritain was here. Paul VI quoted common reminds, commented Maritain’s books, remembered “an

³¹⁰ Nikolaj Aleksandrovič Berdjajev (1874–1948)

³¹¹ Paul-Ludwig Landsberg (1901–1944)

³¹² Maurice Nedoncelle (1905–1976)

³¹³ Paul Ricoeur (1913–2005)

³¹⁴ Jean Nabert (1881–1960)

³¹⁵ René Le Senne (1882–1954)

³¹⁶ Gabriel Madinier (1895–1958)

³¹⁷ Jean Lacroix (1900–1986)

³¹⁸ Joseph Coppens (1896–1991)

³¹⁹ Jean Guitton (1901–1999)

unforgettable evening together at Taverna Palace where was represented the theatre of Satie's Socrate"³²⁰ (1996, p. 495).

In fact, in *Populorum Progressio* (1967), the influence of Maritain emerges in economic and political affairs regarding the duty of taking account of *pauperism* of all nations in the world, and is so important at that point that Pope Paul VI cited Maritain's *Humanisme Intégrale* (1936) in note number 37 of the text of his encyclical and Maritain's *Les Conditions Spirituelles du Progress et de la Pax* (1966) in note number 16. On the other hand, Maritain's suggestions included inputs of classical Thomism, spiritualism *à la Bergson* and mainly Mounierian community personalism.

2. Human Capital in Cardinal Pavan

We have just maintained that the role of Pietro Pavan in Catholic social thought was unjustly undervalued. Only a few scholars, such as Franco Biffi (1990 and 1992), Rosemarie Goldie (2001) and Fabiano Longoni (1992), have deeply examined the strength of Pavan's works in the development of Catholic social doctrine and in the works of the Second Vatican Council. Anyway, Cardinal Roger Etchegary, when he was president of the Pontifical Council for Justice and Peace, described Pavan as "*the principal collaborator of John XXIII in the drafting of the encyclical Mater et Magistra and Pacem in Terris*" (1992, p. vii), and Monsignor Loris Capovilla, personal secretary of Pope John XXIII, testified to the great esteem

³²⁰ We have not managed to find the original French version of this text. Therefore, we have read this work in Italian. The Italian translation of this quotation is "*Paolo VI riceve poco dopo colui che ritiene suo maestro "con straordinaria bontà" e affetto, osserva Maritain. I due si abbracciano. Paolo VI si dice felice per il solo fatto che il filosofo sia venuto. Evoca ricordi comuni, gli parla dei suoi libri, di "un'indimenticabile serata a palazzo Taverna dove era rappresentato il Socrate di Satie."*

of Pope John XXIII towards Pavan³²¹ at the point that Capovilla has guessed (1999) that the former included the latter among the cardinals *in pectore* (unmentioned) created by Pope John XXIII on March 28th of 1960. In any case, Pavan was named Cardinal by John Paul II in 1985 after his retirement from the Pontifical Lateran University where he had been Rector since 1969 and full professor of Catholic social doctrine since 1947. On the other hand, in the beginning, Pavan was called to Rome in 1945 by Giovanni Battista Montini, at that time a substitute secretary of the Vatican state, in order to guide the initiatives of the newly formed *Istituto Cattolico di Azione Sociale*³²² and coordinate the activities of the *Settimane Sociali dei Cattolici Italiani*. Moreover, Pavan was a personal friend and counsellor of Alcide De Gasperi (Riccardi, 2003) and spiritual assistant of *ACLI*³²³, *Conferenza Nazionale dei Coltivatori Diretti*³²⁴, *Centro Nazionale Artigiano*³²⁵, *Centro Italiano Femminile*³²⁶, *Confederazione Cooperative Italiane*³²⁷, *Unione Cattolica Dirigenti ed Imprenditori*³²⁸, *Movimento dei Laureati Cattolici*³²⁹, *CISL*³³⁰ and of the academic team related to the *Codice di Camaldoli*³³¹. Finally, Pavan strictly collaborated with Father Agostino Gemelli³³² (Gemelli, 1944; Pavan, 1944), founder and rector of the Italian Catholic University and editor of the *Osservatore Romano* newspaper, and was constantly invited to give lectures from the United States to Russia, from Canada to Latin America (Goldie, 2001, p. 83).

³²¹ Pope Roncalli and Pavan met each other in Paris, where the former was an apostolic delegate and the latter a visiting professor (Biffi, 1990: 484).

³²² We can translate this name in English as the Catholic Institute of Social Action.

³²³ This Italian acronym refers to the Italian Association of Christian Workers.

³²⁴ We can translate this name in English as the National Conference of Direct Farmers.

³²⁵ We can translate this name in English as the National Centre of Artisans.

³²⁶ We can translate this name in English as the Italian Centre of Women.

³²⁷ We can translate this name in English as the Confederation of Italian Cooperatives.

³²⁸ We can translate this name in English as the Catholic Union of Managers and Entrepreneurs.

³²⁹ We can translate this name in English as the Movement of Catholic Degreed People.

³³⁰ This Italian acronym refers to the Italian syndicate of Catholic orientation.

2.1 Cardinal Pavan's Human Capital and the Social Architecture

Pavan originally elaborated a systematic conception of human capital within an organic vision of society by drawing from classical tradition, Tapparelli's works and magisterial teachings (Crepaldi, 2003). In his 1939 work, *Il valore trascendentale della persona umana*, Pavan argued for the necessity of identifying an adequate anthropology to elucidate the role of single persons, of intermediate bodies and of institutions in an attempt to attain the common good. Therefore, the bishop, Mario Toso, secretary of the Pontifical Council of Justice and Peace, outlined:

*Pavan elaborates a reflection which must be naturally included in that community personalism of the XX century ... in the attempt at promoting a new humanism open to Transcendence, historical, not anthropocentric but theocentric, politically anti-totalitarian and democratic.*³³³ (2003, p. 14)

Pavan observed that every person has so many spiritual and material needs that any amount of goods and services cannot satisfy them. Man always shows an ineradicable desire to assimilate the *transcendent values* of truth, beauty, goodness and justice that constitute his "heart". As a consequence of this, Pavan believed that these transcendent values cannot be those abstract ones suggested by Plato or by Kant, but those embodied and testified by Christ's life. He maintained that the infinitive desire for the happiness of every person is exclusively fulfilled in the

³³¹ We can translate this name in English as the team of the Camaldoli Codex. It deals with a group of qualified scholars in social and economic matters who organized meetings at the Benedictine monastery sited in the Camaldoli city to find a concrete means of implementation of Magisterial teachings.

³³² Agostino Gemelli (1878–1959).

³³³ The Italian original quotation is "*Pavan elabora una riflessione che si iscrive naturalmente in quel "personalismo comunitario" del secolo ventesimo ... nell'intento di promuovere un nuovo umanesimo*

experience of following Christ here and now. This means that a good social and economic system must respect the person's liberty concerning religious choice, such as the Second Vatican Council later stated, thanks to Pavan's and Pope Paul VI's urging (Sanna, 1999).

On the basis of universal human dignity, Pavan was the first to propose the constitution of an international world authority for regulating market injustices (Zamagni, 2004). From the perspective of defending universal human dignity he also rejected (1957a) any type of selection of persons according to categories of language, race, social class, sex and so forth (Toso, 2004). For Giorgio Campanini on Pavan's views, "*the universality of human rights is strictly connected to the universality of human nature, besides any difference among men*"³³⁴ (2004, p. 41). Pavan thus set forth (1981) that all employments are equal if they are realized with responsibility, intelligence and creativity. A Christian worker is one who carries out his task with *competence, honesty and availability* in collaboration with colleagues. This does not mean that a Christian worker does not have the aim of maintaining his family and of ameliorating the conditions of the life of it. In fact, for Pavan (1962a), family is the privileged space for the growth of a person's human capital (Beretta, Currini, 2003). Here, every person easily communicates her identity and understands the identity of her relatives. As a consequence, in family, the witness of faith is somehow more worthy because the dynamic of gift is constitutive of family workings. Pavan connected this dynamic of gift with that of Trinity. He anticipated some contents of the *Gaudium et Spes*, the just-mentioned pastoral constitution of the Second Vatican Council, by affirming:

*The Gospel narrows the deepest social and political revolution
forever in history ... Why? Because Jesus reveals to human*

aperto alla Trascendenza, storico, non antropocentrico ma teocentrico, politicamente antitotalitario e democratico."

³³⁴ The Italian original quotation is "*L'universalità dei diritti umani è strettamente connessa, nella prospettiva di Pavan, all'universalità della "natura umana", al di là di ogni contingente differenziazione fra gli uomini.*"

*person who is human person by revealing God to her ... For analogy to the relation between God and man we can construct all other human relations according a hierarchical unity ... such as the holiness of marriage, the essential instrumentality of state and society.*³³⁵

Consequently, Pavan contrasted any kind of theorisation related to socialism or liberalism, but he developed Pope Pius XII's indication (1944) to promote the centrality of the human person in political and economic affairs. Pavan was thus in favour of the establishment of a plural democracy if the historical conditions allow it. In fact, Pavan explained that plural democracy has "*its deep and alive inspiration in Christianity*"³³⁶ (1958, p. 219). This last motivation is particularly significant because it implies that a democracy presupposes the people's consensus on the Christian culture for working (Zamagni, 1997). In fact, Pavan held (1950a) that the Revelation allows us to consider society as a spiritual entity because it is formed by human persons. If human beings are conceived as persons and not as individuals, a state can become a good instrument at the service of the *integral* well-being of human community (Pavan, 1963). In concrete terms, this means that politicians must be much wiser by intervening in market activities according to the principles of subsidiarity and solidarity in order to respond to market failures and injustices, to orient persons' actions towards the common good and to recognize the liberty of a persons' economic initiative (Manzone, 2000). In fact, the principal actors of the economy must be human persons and intermediate bodies. Pavan highlighted that the features of a person's human capital are *freedom, creativity, responsibility* and *sociability*, which are fully developed when a person works with other persons together in the name of a transcendent ideal. For this reason Pavan strongly distinguished between the human freedom of Christian thought, that is the

³³⁵ The Italian original quotation is "*Dal Vangelo si determinò la più profonda rivoluzione sociale e politica, forse la più vera rivoluzione sociale che mai si sia verificata nella storia ... Perché mai? Gesù rivelò Dio all'uomo ... La precisazione del rapporto fra l'uomo e Dio si ripercosse in tutti gli altri rapporti umani, li compose e corresse in gerarchica unità ... come la santità del matrimonio, l'essenziale funzionalità dello Stato e della società.*"

human capacity of taking choices in relation to conscience, and the freedom invoked by the scholars of liberalism, that is the “*pure spontaneity aimed to selfishly attain individual objectives*”³³⁷ (1957b, p. 290). Secondly, Pavan argued that the intermediate bodies possess an autonomous *creative subjectivity*, which is much important for the attainment of society’s common good.

2.2 Cardinal Pavan’s Human Capital and the Economic Order

Pavan attained a degree in political science at Padua University, besides one in theology and one in philosophy at the Pontifical Gregorian University in Rome. He had a humanist background and a specialised preparation in social sciences which uniquely allowed him to propose (1938 and 1945) interesting insights concerning the relation between ethics and economics *within* the economic epistemology. In fact, he demonstrated that the macroeconomic and microeconomic models of mainstream literature deny the consideration of *moral judgments* of economic agents (Fazio, 1996). During the process of decisions, a human person realizes moral choices, although these choices can be apparently neglected. In this sense, Giovanni Tondini pointed out that:

Pavan underlines the mistake made by those economists who think that acting economically is the same as acting morally. Such a mistake is due to a false analysis, since the economic rationality can be identified with morality only if the “sectional” rationality (typical of the productive activity) is not distinguished from the “universal” rationality (peculiar to the moral order). The former concerns only human activity, the latter concerns the whole man, considered in the totality of his relations: with himself, with God, with the others. Therefore, as

³³⁶ The Italian original quotation is “*la sua profonda e vivace ispirazione nel cristianesimo.*”

³³⁷ The Italian original quotation is “*pura spontaneità, tesa a conseguire egoisticamente interessi individuali.*”

Saint Thomas of Aquinas taught, the sectional rationality must be followed and fulfilled within the limits fixed by the other one. That is why in everyday language it is usually said that “profit must be pursued within the bond of honesty”. In fact, profit is only half-justified in comparison with moral good; as a result, the former must be pursued subordinately to the latter. (1998, p. 1645)

In fact, Pavan thought that the economic aims must be conciliate with the moral claims for the attaining of the common good. This is not a macroeconomic dimension but an aspect of every person’s human capital. For Pavan, man must act within a perspective of morality to develop his personhood and integrally perform his talents. Human action cannot only be realized for the goal of utility but also for that of personal growth. In this regard, Pavan wrote:

It requires that the utility that a human person tends to realize becomes concrete in an affirmation and in a fulfilment of her humanity ... A human person in every act has the duty of revealing herself as a human person, consequently even when she attains the utility she has the duty of operating in conformity to moral law.³³⁸ (1943, p. 270-271).

We can draw from this affirmation why Pavan was so careful to distinguish (1947) between the Christian right of *personal initiative* and that of the liberal right of private

³³⁸ The Italian original quotation is “*Occorre che l’utilità che l’uomo tende a realizzare si concreti in un’affermazione e in un perfezionamento della sua umanità ... L’uomo in ogni suo atto ha il dovere di realizzarsi uomo: quindi anche quando persegue l’utile ha il dovere di operare in conformità a quella legge che segna lo sviluppo della sua umanità, la quale legge è quella morale.*”

initiative. In the former case, freedom is recognized in a human being who is both the creator and the one responsible for his own actions, while in the latter case, liberty is constituted by a simple lack of exogenous interventions in market activity independently from the morality of the person's exercise of this liberty (Zamagni, 1995). In addition, Pavan defended (1957c) the right of *propriety* and invited its diffusion everywhere. In his opinion, this right represents a guarantee of the *universal destination of goods* among persons according to social justice because it avoids, on one side, the attempts of the rich to put more poor people into a condition of slavery and, on the other side, reduces the fashion of the utopian proposals advanced by the collectivist ideologies. Finally, Pavan explained (1950b) that an *economic order* is possible if there is an active civil society which tries to unify the individual interests with the general ones (Finn, 2006). This supposes the agreement of the population regarding the primacy of labour factor over the capital factor in the economy. As mechanization had substituted workers in some phases of the production process, Pavan stated (1962b) that the states might invest many resources in the formation of more highly qualified competences of persons. He referred to works of planning, projecting, managing and controlling. Concerning these working positions, Pavan stressed the importance of the human spirit, such as “*the capacity of understanding novelties, of discovering new solutions, of introducing innovation, of acting with social sensibility and responsibility*”³³⁹ (1971, p. 524). For Pavan (1980), these features of a person's human capital will never be substituted by machines because they are strictly a part of human nature.

3. Human Capital in Vito

Francesco Vito was a Franciscan tertiary who came from Naples and was endowed with a degree in law (1925), another in political science (1926) and another in

³³⁹ The Italian original quotation is “*un lavoro sempre più qualificato di programmazione, di progettazione, di direzione, di controllo, un lavoro cioè in cui sono soprattutto impegnate le forze dell'animo: intuito divinatorio, inventività creativa, spirito di innovazione, sensibilità sociale, senso di responsabilità.*”

philosophy (1928). He moved in 1929 to Milan because he won a fellowship at the Catholic University thanks to the recommendation of Monsignor Pietro Del Prete³⁴⁰ to Father Gemelli (Caloia, 1998, p. 7). Here, Vito became a full professor, director of the department of economics, director of the review “*Rivista Internazionale di Scienze Sociali*”³⁴¹ –founded by Toniolo and Talamo– from 1945, director of the review “*Studi di Sociologia*”³⁴² from 1963, dean of the faculty of Political Sciences, Vice Rector (1943–1945) and finally Rector (1959–1965). During his career, Vito went around the world for periods of study. He examined trusts, syndicates, cartels and the increasing technical progress in Munich University under the supervision of Alfred Weber³⁴³, while he analysed topics of history of economic thought in Berlin University in collaboration with Edgar Salin³⁴⁴. Then Vito was a research student at the London School of Economics and Political Science, working under the supervision of von Hayek and attending the seminars of Robbins concerning the nature of economic science and finally he received a Rockefeller Foundation grant to spend two years in the United States in the institutes of research he wanted. He chose to participate in scholarly activities at the beginning of his time at the Columbia University of New York and then at Chicago University under the supervision of Knight.

Vito was a central figure in the scenario of a Catholic world successive to the Second World War at the point when he was called to guide, as Vice-President with Pavan, the *Settimane Sociali dei Cattolici Italiani* and to directly participate in the activities of the Second Vatican Council as a lay listener (Formigoni, 2008). Although he was constantly in contact with many non-Catholic scholars who proposed an economic epistemology of neutrality (Parisi, 2009), Vito proceeded

³⁴⁰ Pietro Del Prete (1885–1950)

³⁴¹ We can translate this denomination as the “International Review of Social Sciences”. The slow process of specialization that turned “Rivista” into a periodical dealing with economics and statistics had already been evident under Fanfani’s editorship (1933); so much so that in 1934 the original denomination “Rivista Internazionale di Scienze Sociali e Discipline Ausiliarie” (International Review of Social Sciences and Auxiliary Disciplines) was shortly to omit its final title part.

³⁴² We can translate this denomination as “Sociology Studies”.

³⁴³ Alfred Weber (1868–1958)

³⁴⁴ Edgar Salin (1892–1974)

throughout his life in the attempt to *unify* moral claims with economic purposes (Duchini, 1997), such as Pavan had also suggested. Vito realized this effort in a very *concrete way* by introducing (1946) real economic instruments grounded on Christian anthropology (Quadrio Curzio, 2003). Therefore, Vito successfully proved the expediency for society to adopt an economic system directed to the common good *versus* one aimed at total good.

3.1 Vito's Human Capital and the Coordination of the Economy

Pope Pius XI indicated (QA, n. 6) with farsightedness the *Settimane Sociali* as the decisive cultural appointment mechanism for orienting Catholic activities towards the common good of society. Here, the topics of family, education, dignity of labour, enterprise, syndicate, professional organization, social security and economic role of the state and of the international community are viewed from a *perspective of unity*. In the history of the *Settimane Sociali* we can see that the participants do not try to solve problems of social politics but are invited to examine the facts in the light of eternal principles. As Tapparelli just pointed out, Vito held (1945a) that the ethic of an economic activity is determined by the connection between the absolute values of Christianity and the contingent aspects of present situations. Therefore, as ethics are *endogenous* factors in economic decisions, Vito advised humanity to resist the temptation of confusing economic growth with human development. He explained (1945b) that social reform must lead from the right of labour to the protection of the worker in his physical and moral entirety. In the 1949 *Economia e Personalismo* Vito wrote:

The appeal to a personalist vision of the economy needs to be the invitation to prefer the ethical primacy over the technical one, thus to surpass both forms of economic organizations, the collectivism and the ideology of the free market, whose arrogant

*technical performances are respectively at the service of depersonalized aggregations and of privileged powerful men.*³⁴⁵

(1949, p. 47)

Vito rejected the theory of the use of economic instruments in an anti-market perspective as well as the identification of economics with physical science based on a general economic equilibrium. He strongly contrasted the framework of the utilitarian philosophy and positivist methodology because it introduced “*a social conception which separates economics from moral order*”³⁴⁶ (Vito, 1957, p. 228). On contrary, as Siro Lombardini³⁴⁷ (a Vito’s pupil) suggested, we cannot assume that society is an entity distinguishable from human persons because the “*human behaviours cannot be understood set aside from society*”³⁴⁸ (1993, p. 760). In fact, the labour factor is judged as the principal factor of the dynamic of formation of economic value. Vito clearly stated:

*It is not the human person that has to be adjusted in conformity to the machines constructed for productivity purposes, but the machines –and, in general, all the technological structures and conditions– that have to be adapted to the human person’s stature*³⁴⁹ (1959, p. 388).

³⁴⁵ The Italian original quotation is “*L’appello alla visione personalistica dell’economia vuol essere appunto invito ad optare per il primato etico sul primato tecnico, e quindi a superare l’una e l’altra forma d’organizzazione economica, il collettivismo e l’automatismo di concorrenza, in cui le superbe realizzazioni della tecnica o sono al servizio dell’uomo collettivo o procurano il vantaggio dei privilegiati.*”

³⁴⁶ The original Italian quotation is “*concezione sociale separatrice dell’economia dall’ordine morale.*”

³⁴⁷ Siro Lombardini (1924–)

³⁴⁸ The Italian original quotation is “*non si possono comprendere i loro comportamenti prescindendo dalla società.*”

³⁴⁹ The Italian original quotation is “*Non è l’uomo che deve essere adattato alle macchine costruite per fini di produttività, ma sono le macchine – e, in genere, tutte le strutture e condizioni tecnologiche – che devono essere apprestate secondo la statura dell’uomo.*”

On the basis of this awareness, Vito suggested a *coordination* of the economy. He studied non-competing markets, cyclical fluctuations, world hunger and backwardness and socio-cultural factors affecting development and territorial disparities. In the perspective of a *social solidarity*, he believed that it was possible to combine the introduction of technological innovations with the preservation of employment positions, the increase of the supply of consumption goods with the recovery of gains for capital investments. This meant to qualify and specify manpower in shaping the dialectic between capital and labour in order to attain the common good of society. Vito thus proposed to emphasize the role of administrative institutions, social intermediate bodies, organizations of entrepreneurs, syndicates of workers and so forth. He believed that civil society can modify the law of naked competition in economic trades by substituting a coordination of them according to principles of solidarity, reciprocity, cooperation and gifts. The point in Vito's insight was to promote *social justice* through fiscal and redistributive policies to allow everyone the access to the services of education, health, professional training, retirement and social aids. Angelo Caloia underlined that the welfare state theorised by Vito was much different than that realized in European countries after the Second World War because this last "*missed the objective of personalism ... the duty of personal responsibility and the supply not of material resources but of human investments in a strict sense*"³⁵⁰ (Caloia, 1998, p. 125). Vito pointed out that liberalism had caused too many failures, such as unemployment, regional discrepancies, international conflicts and underdevelopment in some large areas of world (Magliulo, 2008). Contrary to this, he proposed a theory of economic development in the perspective of international collaboration grounded on the growth of persons' human capital. For human capital, he referred not only to the competences and abilities of entrepreneurs and workers but also to their practice of moral virtues, which distinguish human personhood. Vito invited all men to "*apply in the temporal field that interior liberty which nourishes and empowers the dignity of the human person*" (1949, p. 46).

³⁵⁰ The Italian original quotation is "*se si fosse tenuto in mente l'obiettivo del personalismo ... si noti l'onere di responsabilità personale e l'offerta non di generiche risorse materiali, ma "specificamente" di investimenti umani.*"

3.2 Vito's Human Capital in his Plan of Reform of the Italian Education System

Vito mainly analysed the importance of human capital in the economic and social context within his proposals to reform the Italian system of education. He possessed significant experience as a researcher and teacher and was called to the presidency of the Association of University Professors and Lecturers, to the vice-presidency of the International Federation of Catholic Universities and to the board of the International Association of Universities. In addition, Vito collaborated with the Pontifical Commission regarding Universities and Seminars formed for directing the works of the Second Vatican Council on this matter.

The Italian University system was still based on the 1859 Casati law, while that of elementary and secondary schools was updated by the 1923 Gentile Reform, according a bureaucratic centralization of powers. However, Vito did not propose an original theory of human capital but highlighted that the reform of education cannot be promoted in a perspective of efficiency calculus. He pointed out that the Latin expression “*vir bonus dicendi peritus*”³⁵¹ is always true because who acts in obedience to an adequate *hierarchy* of values generates behaviours that are also useful in economic terms. From a macroeconomic perspective, Vito understood that the growth of the population and the progress of the role of women in society implied an increase in education demand. He viewed in this change the creation of many specialized figures capable of introducing new modalities of production by using technological instruments and discovering other ones. Vito thus required *state intervention* in the education markets to give every person the possibility of achieving her intellectual talents. On the other hand, Vito advised the presence of the risk that

the stress on the instrumental function of the school from the perspective of the accumulation of material goods could shift the

*focus of study from the emphasis on human values and from the research of truth.*³⁵² (1967, p. 172)

As a consequence of this, Vito recommended promoting initiatives dedicated to the research of the *unity of knowledge*, such as those which he attended within the Committee on Social Thought of Chicago University. This means that a student and more so a professor must follow external courses to their working programmes to enrich their formation. In fact, Vito stated:

*The preparation of specialized labourer, of professor, of professional worker, of teacher, is not complete if it is at the same time also the integral formation of person.*³⁵³ (1952, p. 22)

How could this integral formation of person take place? Vito responded that in the process of the flourishing of man's human capital it is essential that there is a presence of a human *community* around him (Riccio, 1997). This means that schools and universities must transform into a space where the spirit of cooperation is a constitutive dimension. In Vito's mind, this climate of friendship in educational institutes would be later communicated throughout society through the work of culture transmission operated by professors and students in their natural social relations. For example, a career in liberal professional works would become more human if the social relation is grounded on reciprocal valorisation of capacities and personhood between the magister and the pupil than if the social relation is based on the former's exploitation of the

³⁵¹ We can translate this Latin expression as “*the good man is even an expert in identifying the best way of action.*”

³⁵² The Italian original quotation is “*l’accentuazione della funzione strumentale della scuola in vista dell’accrescimento dei beni materiali a scapito del preminente ufficio di educazione, di esaltazione dei valori umani e di ricerca della verità.*”

³⁵³ The Italian original quotation is “*La preparazione dello specialista, del professore, del professionista, dell’educatore, non è completa se non è al tempo stesso formazione dell’uomo.*”

latter's availability. Vito was somehow a prophet of our times regarding the indispensable necessity of determining a *set of ethical values* in the approach to sciences, in economics as well as in medicine or in biology or in other areas (Duchini, 1993). Finally, Vito advanced some practical proposals, such as the constitution of public funds of fellowships for students who attain the best performances, the creation of two lines of academic courses, one oriented to shape a working-life preparation (Degree and Master) and another with research profile (Degree and Ph.D.) following the Anglo-Saxon model and the alternative modalities of financing economic research. On this last point, Vito showed some difficulty around allowing private subjects to finance research studies because this leads research into the service of enterprises' interests instead of into the service of all humankind.

4. Human Capital in Pope John XXIII

In the 1961 *Mater et Magistra* encyclical letter, Pope John XXIII recognized the importance of human capital in providing responses to human needs within the context of subsidiarity. Drawing upon *Quadragesimo Anno* (1931), Pope John XXIII stated that it is an injustice for larger associations to claim responsibility for activities that can be performed by smaller associations or single persons. In light of this principle of action, he argued:

In the economic order first place must be given to the personal initiative of private citizens working either as individuals or in association with each other in various ways for the furtherance of common interests. (MM, n. 51)

Secondly, discussing theories of industrialization, Pope John XXIII held that it was an urgent matter to support the person's freedom in economic affairs. This means

providing the means necessary to people for creating new entrepreneurial activities as well as to favour the work of intermediate bodies which try to perfect *personality* and a sense of responsibility in human beings. In fact, for Pope John XXIII, the freedom to take the initiative enables persons to actualize themselves more fully as persons created and loved by God. On the other hand, Pope John XXIII connected the person's right of propriety and that of creating business activities with the responsibility of global economic development. As a consequence of this, he attacked the *unequal distribution* of wealth in the world and invited the political leaders to promote the action of the balancing of social injustices. Pope John XXIII affirmed:

Public authority must encourage and assist private enterprise, entrusting to it, wherever possible, the continuation of economic development. (MM, n. 152)

Indeed, Pope John XXIII exhorted to create a wide collaboration among nations even in his 1963 *Pacem in Terris* encyclical letter. Here, he stimulated the entrepreneurs to establish their activities in underdeveloped regions by insisting on the moral implication of their role in the economy (Pavan, 1988). For this reason, Pope John XXIII argued that the rights of propriety and of realizing personal economic initiatives are consequences of the person's dignity. The value of this dignity is ontologically un-reducible even concerning attempts at reduction connected to better efficiency of the economic system or to improve the performances of firms. Social justice is not a matter of contraction because it directly derives from moral natural law.

5. Human Capital in Mounier

Although Mounier was a philosopher and not a scholar of social sciences, he contributed to the elaboration of the concept of human capital by pointing out the necessity of a change of people's mentality aimed at changing the way society works. He invoked (1936a) a "revolution of human hearts" capable of transforming from inside the political institutions and the economic practices of affairs. In Mounier's project, the central point was realized as a process of *unification* of the fragmented anthropology imposed by positivism. In his view, it was necessary to rediscover the *natural order* of personal and social life which characterized the Middle Ages. In fact, in the first edition of "Esprit", Mounier argued (1935) for a new Renaissance capable of rendering to human persons their dignity of being created in the image of God.

Mounier, on one side, developed the importance of the concept of person and, on the other side, the necessity of properly taking account of human capital in economic dynamics. He affirmed that a person was ontologically more than a simple individual by giving the example of his first daughter. Mounier argued that his daughter Fraçois, although handicapped from cowpox with lost self-knowledge and self-mobility, remained a person, because being a person is an original property independent of the possession of some, even elementary, capacities (Domehach, 1972). However, from a political perspective, Mounier supported cultural battles in favour of the Spanish republicans, to Algerian liberty and to the Hungarian revolution (Winock, 1975).

According to Mounier, while man's final end lies in the next world, it is essential to work for a better here and now. Persons must bear witness to the eternal verities by committing themselves in the *temporal affairs* of their time. However, he pointed out:

*Personalism is a philosophy and not exclusively a modality of behaviour. It is a philosophy and not a system ... But the decisive affirmation of personalism is the presence of free and creative persons. This introduces at the fundamental of any politics and economics a principle of uncertainty which destroys the want of definitively systematizing the social structure. Today there is nothing so absurd than to want to provide solutions to problems as an automatic distributor by undervaluing the persons' worries, uncertainties, and values.*³⁵⁴ (1949, p. 8).

Consequently, Mounier emphasized the *freedom*, the *creativity* and the capacity of developing *social relations* as the distinctive features of the human capital of people (Moix, 1960). His theorisation of community personalism was based on the person's social nature. Mounier held (1966) that for a person it is decisive to belong to a community in order to develop talents and participate in the attainment of the common good of society, as man is a unity made by body and soul, as man is a unity made by a desire of self-interest (individualism) and one of community-interest (socialism). In Mounier's judgement (1936b), capitalistic systems generate a spirit against good human relations and against the care of the spiritual aspects of human life; rather, planning economies eliminate the freedom in human work and in private life. Instead, the society of the Renaissance needs the cultivation of an anthropology of people which takes contemporaneously into account the individual human tension as well as social human tension (Hellman, 1981; Siernhell, 1984). This can only happen if people accept the Christian message of salvation. Christian moral and ethical values shape virtuous behaviours of people and transform the

³⁵⁴ The French original quotation is “*Le personnalisme est une philosophie, il n'est pas seulement une attitude. Il est une philoso- phie, il n'est pas un système ... Mais son affirmation centrale étant l'existence de personnes libres et créatrices, il introduit au coeur de ces structures un principe d'im-prévisibilité qui disloque toute volonté de systématisation définitive. Rien ne peut lui répugner plus profondément que le goût, si commun aujourd'hui, d'un appareil de pensée et d'action fonctionnant comme un distributeur automatique de solutions et de consignes, barrage de- vant la recherche, assurance contre l'inquiétude, l'épreuve et le risque.*”

market into a *trustworthy* place of reciprocal gifts. In addition, Mounier highlighted (1946) that Christianity has a constitutive *eschatological* character and cannot be identified with any particular economic system. Nevertheless, Mounier recognized that the incompatibility of human capital promoted by Christianity can be affirmed when considering some kinds of economic systems, such as capitalism and socialism. A just society presupposes a “revolution” of the content of people’s human capital because any economic system can give happiness to men. Secondly, Mounier thought that happiness was exclusively possible only when the person meets the person of Jesus Christ risen again.

6. Human Capital in Maritain

Jacques Maritain suggested some important new ideas regarding human capital in Catholic social thought. He belonged to Mounier’s personalist group and wrote many papers in “Esprit” (Danese, 1986). But he also attended the Thomist classical school and taught for many years in the United States (Doering, 1983). In his *Le Personne et le Bien Commune*, Maritain elaborated (1947) an original proposal founded on the valorisation of the *integral upbringing* of persons in a social context ordered according to the natural law of creation wanted by the Creator. In fact, the initial Maritain belief (1929) that everything is intrinsically aimed at an end, which in turn tends towards the unique End (the truth of the same Creator), was enriched by Mounier’s personalist perspective. Therefore, for Maritain (1937), a human person can adequately comprehend every contingent aspect of reality only in relation to a wider understanding of the meaning of all reality. In this picture, human capital is constituted by the human intellect and the human will, which work together to attain the knowledge of reality.

On the other hand, Maritain distinguished the moral institutions from the political ones in his 1936 *Humanisme Intégrale*. He thought (1951) that Church and state have a different nature and must be careful to diversify their problems. The

Church does not directly intervene in political matters as well as the state has to abstain from commenting on religious questions. In fact, Maritain observed:

As far as the Church herself is concerned, it is not her task to descend to undertakings directly temporal in the ebb and flow of political activities. Hers is the treasury of energies of another order more hidden and more powerful. It is justice and love, and Christian revelation, which she must keep alive. Once they have been conveyed into the substance of history, these energies have their own action which unfolds in a measure of duration quite different from the rhythm of time. (1946, p. 112)

Nevertheless, Maritain identified (1960) the common point of action of Catholicism and state in the growth of human capital. Human capital is actually fundamental for economic improvement and for social stability as well as for the maturity of people's faith (Possenti, 1983). As a consequence of this, Maritain stated (1960) that a human capital which incorporates Catholic values (e.g. the concept of human person, human dignity, value of life etc.) shapes the minds of people in a better possible way in supporting the working of the economy. In fact, he believed (1967) that the natural law of creation in a Thomist sense has been perfectly revealed in Christian fact and can now be known by the human person. How? Maritain pointed at the necessity for the human person to cultivate good *social relations* with all others; to care for *every spiritual and material aspect* of her life; to develop every characteristic and talent of her *personhood*. In this way, Maritain put forward the basis of the concept of "integral human development", which was then developed by Pope Paul VI (Acone, 1982; D'Souza, 1996).

7. Human Capital in Pope Paul VI

It is rumoured that Pope Paul VI was intransigent and trusted to tradition regarding topics of moral theology, such as the rejection of anti-contraceptive methods in his 1968 *Humanae Vitae* encyclical letter and his strong stance against divorce and abortion laws, while he was progressive concerning social doctrine, such as his invite to the development of the third world in his 1967 *Populorum Progressio* encyclical letter and his creation of the Pontifical Council of Justice and Peace. However, we personally think that this contradiction is totally false if one looks at Pope Paul VI's teachings from a perspective of Christian anthropology conceived as *integral human development*. We know that his pontificate took place in the age of radical changes of the values of society, such as the rebellions of students in universities, the female movement, the sexual revolution and so forth. Faced with these circumstances, Pope Paul VI opposed the Christian paradigm of integral human development which Pope Benedict XVI recently developed in his 2009 *Caritas in Veritate* encyclical letter. Daniel Finn clearly affirmed:

This issue of development down to some kind of formula that econometrics cannot measure easily. Human development is the way out of this problem, but it must integrate all aspects of human flourishing, which would include the family as one psychological state, equations of status in society, and spiritual questions, all of which taken collectively could create a proper development plan. The other piece is the fact that all of these elements claim that integral human development needed in our own lives, rather than being a special case, based on a fundamental Christian anthropology. In other words, it is not just something we desire for the people of Guatemala or Tanzania. It is something we all need. (Finn, 2009, p. 2)

In fact, Pope Paul VI adopted the personalist framework when he recognized that the persons coming from underdeveloped countries are “*deprived of almost all possibility on their own initiative*” (PP, n. 9). For Pope Paul the development of human capital meant a growth of economic initiatives, an empowerment of creative subjectivity of intermediate bodies, a defence of private property, a support to free commerce, a reduction of economic abuses towards the more flawed persons and an improvement of public political institutions aimed at guaranteeing peace and security. From this same perspective (not in a parallel one) Pope Paul highlighted the claim of attaining *social justice* within every nation and mainly among nations. He observed that “*lacking the bare necessities of life, whole nations are under the thumb of others; they cannot act on their own initiative*” (PP, n. 30). Indeed, Pope Paul believed that the economic power was concentrated into too few developed nations while the majority of the population was condemned to misery. He contrasted the “theory of dependency” of the third world with the developed world. In poor countries, the available resources of eating goods were actually incapable of satisfying the elementary needs of the people. As a consequence of the liberal principle of demand and supply, the rich nations imposed *unequal rules* of international trade on poor nations, which they were forced to accept. Facing this situation, Pope Paul set forth the human character of economic activity, evoked the moral importance of the human spirit of solidarity and asked powerful nations to modify their behaviours (Vito et al, 1967).

However, Pope Paul VI did not give a set of practical instructions for solving economic problems in the world (e.g. famine), and neither did he outline an economic theory alternative to his predecessors. Rather, he exclusively advanced moral suggestions from a Christocentrism perspective at the point when he personally explained in his *Octogesima Adveniens* apostolic letter that

in concrete situations, and taking account of solidarity in each person's life, one must recognize a legitimate variety of possible options. The same Christian faith can lead to different

commitments. The Church invites all Christians to take up a double task of inspiring and of innovating, in order to make structures evolve, so as to adapt them to the real needs of today ... It is true that people, in the midst of modern structures and conditioning circumstances, are determined by their habits of thought and their functions, even apart from the safeguarding of material interests. Others feel so deeply the solidarity of classes and cultures that they reach the point of sharing without reserve all the judgments and options of their surroundings. Each one will take great care to examine himself and to bring about that true freedom according to Christ which makes one receptive to the universal in the very midst of the most particular conditions.
(n. 50)

However, Pope Paul VI updated the Catholic theory of the “third way” to the new economic scenario by confirming the centrality of a person’s dignity and the role of intermediate bodies in economic affairs (Ambrosio, Berretta, Bertoni, 2008). Pope Paul VI hardly contrasted socialism as well as the philosophy of individualism which lays beyond value-free liberalism. He opposed a community personalism *à la Mounier* and *Maritain*, where human personality flourishes within social relations inspired by the experience of Christian faith. From this perspective Pope Paul developed Vito’s suggestions regarding human capital in a specific section of *Populorum Progressio* called “Man’s Complete Development”. When considering the industrialization necessary for human growth and human progress, Pope Paul stated:

Trough intelligent thought and hard work, man gradually uncovers the hidden laws of nature and learns to make better use of natural resources. As he takes control over his way of life, he is stimulated to undertake new investigations and fresh

discoveries, to take prudent risks and launch new ventures. (PP, n. 25)

On the other hand, speaking to the “Christian Union of Employers and Executives” in 1964 Pope Paul had particularly praised the entrepreneurs’ and managers’ attitudes to taking initiative, accepting business risks, creating jobs, promoting working conditions, developing scientific and technological innovations, making beneficial sacrifices and resolute forecasting. In conclusion, Pope Paul VI proposed a balanced picture of roots for attaining the common good. He underlined that real social justice is an output of a *complementary relation* between human freedom and human responsibility, human capacities and human duties, the principle of subsidiarity and principle of solidarity, commutative justice and distributive justice. In Pope Paul’s view, to practically teach this complementary relation, it is necessary to provide an integral formation to all persons, especially those that were born in poorer nations. It deals with a claim of an *equality of opportunities* among persons, not of a “socialist” equality of rewards, because in Pope Paul’s mind the reward of a *person’s merit* for acting better than others is not excluded from this.

8. Conclusions

In this chapter we have analysed authors who cover many common points regarding the topic of human capital because they used the same metaphysical framework and the same non-analytical method of inquiry. On his side, Pavan set forth (1943) that the social architecture of a nation can significantly influence the growth of persons’ human capital. His support for political democracy was justified (1958) because this type of political system was the more suitable to valorise the importance of intermediate bodies in economic affairs. Pavan thus suggested (1957b) the realization of an economic order grounded on the human dignity of every person and aimed at attaining the common good of the entire society. Vito contributed (1949) in the same direction but introduced

a series of economic practical instruments, such as the combination between the establishment of ever-more technological machines in the production process and the preservation of employment through the specialization of manpower. Secondly, Vito remembered (1962) the importance of educating persons to reflect on the sense of their life and to research the truth of reality. Otherwise, people risk becoming similar to intelligent computers that carry out a task and nothing else. This could mean an increase in the total good of society (economic growth) but certainly would neglect the common good of society (human development).

Mounier's philosophy of community personalism tried to confirm the Aristotelian-Thomist paradigm of the human being as a social being by highlighting (1949) that being a person is an ontological quality which cannot ever be placed for discussion, even in cases of quasi-elimination of basic and elementary capacities (as in the daughter of Mounier). This substantive personalist approach to economic epistemology was developed by Maritan (1937) within a Thomist and organic vision of reality (Viotto, 2000). Maritain clearly distinguished (1946) the role of spiritual institutions, like the Church, from those of temporal institutions, like the state. Nevertheless, he also argued (1944) that the good exercise of a person's freedom, the flourishing of human personhood and the development of a person's creativity are important for spiritual institutions as well as for political ones.

Finally, Pope John XXIII and Pope Paul VI held the primacy of labour factor over the capital factor as had their predecessors. The former, in *Mater et Magistra* (1961) and in *Pacem in Terris* (1963), particularly identified in the moral responsibility of entrepreneurs the decisive factor for the growth of underdeveloped regions. The latter, in *Populorum Progressio* (1967), pointed out the necessity of recovering the "world's sickness" by diffusing a culture of friendship and solidarity among persons and by applying measures of social justice in economic trade and in relations among nations. However, Pope Paul VI referred to the equality of possibilities for all people and not to a "socialist" distribution of resources without the premium of a persons' effort and merit –as some scholars have commented.

Chapter 5

Human Capital in the Contemporaneous Catholic Principal Schools of Thought and in Pope John Paul II and in Pope Benedict XVI:

A Love-Based Anthropology

1. Introduction

In this last chapter we analyse the conception of human capital present in recent Catholic social thought. We thus examine the social encyclicals of Pope John Paul II, which are strongly influenced by his theological and philosophical original background. Secondly, we set forth how the American Neo-Conservative and personalist schools have developed Pope John Paul II's economic view with a special reference to the topic of human capital. Finally, we highlight the connection used by the Italian school of civil economy between the economic thought of Pope John Paul II and that of Pope Benedict XVI.

2. Human Capital in Pope John Paul II

Karol Wojtyła introduced an original philosophical and theological approach to personalism and generally to the Catholic method of scientific knowledge. This novelty appeared in his Ph.D. dissertation about Saint John of the Cross at the “Pontifical University Saint Thomas Aquinas – Angelicum” in Rome and then during his experience as ethics professor at the Catholic University of Lublin (Buttiglione, 1982). However, in his 1969 *Osoba i Czyn*³⁵⁵, Wojtyła mainly laid out his unique description of the human journey by unifying the Thomist classical tradition of truth, discovered within the entire reality created (static conception), with Edmund Husserl's³⁵⁶ (1913)

³⁵⁵ This work was translated into English as *Acting Person*.

³⁵⁶ Edmund Husserl (1859–1938)

and Max Scheler's³⁵⁷ (1913–1916) phenomenological novelty of meeting truth during personal action (dynamic conception). This framework, focused on the elementary human experience of every person, significantly also characterizes Pope John Paul II's teachings. We can think of the lessons on the theology of the boy of the Thursday public audience as well as to the dogmatic encyclical letters, such as *Redemptor Hominis* (1979), *Veritatis Splendor* (1993) and *Fides et Ratio* (1998). Consequently, Pope John Paul II's philosophical and theological novelty has shaped the conception of human capital present in his social encyclical letters *Laborem Exercens* (1981), *Sollicitudo Rei Socialis* (1987), and *Centesimus Annus* (1991).

2.1 Pope John Paul II's Human Capital in *Laborem Exercens*

In *Laborem Exercens* (1981), Pope John Paul II advanced an idea of work as the place of a person's *sanctification*. Every human being is the actor of work and the purpose of work (LE, n. 6). A person is thus called to work as an analogy to God, who made world and continues to intervene in reality through Providence (LE, n. 14). Man is created in the image of God and thus

shares by his work in the activity of the Creator and that, within the limits of his own human capabilities, man in a sense continues to develop that activity, and perfects it as he advances further and further in the discovery of the resources and values contained in the whole of creation. (LE: n. 20)

As labour is the human activity of transforming matter to attain a certain aim, Pope John Paul II identified two moments where a person's morality is required: the modality

³⁵⁷ Max Scheler (1874–1928)

of taking a decision (morality of the means of action) and the final goal searched (morality of the end). Therefore, he somehow enriched the tradition of the Catholic social doctrine by emphasizing the *subjective* character of human work. Pope John Paul II agreed with his predecessors concerning the importance of supporting intermediate bodies in society and building an institutional and legislative pattern for guaranteeing working conditions respectful of un-reducible human dignity. In fact, he wrote:

The modern unions grew up from the struggle of the workers ... to protect their just rights vis-à-vis the entrepreneurs and the owners of the means of production (LE, n. 20).

Pope John Paul II, at the same time, highlighted that a person is called to perform herself during working activity by realizing with responsibility her own task. This means that what is important is not the type of job –being a lawyer, a farmer or a housewife– but the kind of *working spirit*. In fact, Pope John Paul II set forth that the economy does not involve abstract forces but “*behind concepts there are people, living, actual people*” (LE, n. 14). For this reason, he suggested giving room for wide governance assessments of firms capable of directly improving all workers, as Toniolo had just argued. When entrepreneurs share, with their employees, the ownership of the firm, the likelihood of creating an authentic community of work increases because the implied solidarity and common action will evolve as a reaction against “*the degradation of man as the subject of work*” (LE, n. 8).

Finally, Pope John Paul II clearly distinguished between human capital and material capital according to a qualitative perspective. He stated:

Everything contained in the concept of capital in the strict sense is only a collection of things. Man, as the subject of work, and

independently of the work he does ... man alone is a person.

(LE, n. 12)

2.2 Pope John Paul II's Human Capital in *Sollicitudo Rei Socialis* and *Centesimus Annus*

In *Sollicitudo Rei Socialis* (1987), Pope John Paul II connected the business initiative with global economic development, as Pope Paul VI's *Populorum Progressio* (1967) had just promoted. Discussing world-wide poverty, he affirmed that persons have the right to share in the building of society as well as “*the freedom to organize and to form unions or to take initiatives in economic matters*” (SRS, n. 15). Pope John Paul II praised creative initiative but contemporaneously highlighted the moral duty of any entrepreneur of providing working conditions respectful of human dignity. In fact, he who is naturally endowed with business capacity must develop his talents and collaborate in the development of the regional area where he lives (SRS, n. 65). The final goal of the economy is the attainment of the common good because personal good does not concretely exist without social good. This awareness constitutes the basis for performing the concept of well-being in developed countries according to an integral conception of the quality of life as well as for improving the economic situations of poor countries.

In a continuation of this concept of economics and of human capital in *Centesimus Annus*, Pope John Paul II recognized:

In history, these two factors –work and the land– are to be found at the beginning of every human society. However, they do not always stand in the same relationship to each other. At one time the natural fruitfulness of the earth appeared to be, and was in fact, the primary factor of wealth, while work was, as it were,

the help and support for this fruitfulness. In our time, the role of human work is becoming increasingly important as the productive factor both of nonmaterial and of material wealth. Moreover, it is becoming clearer how a person's work is naturally interrelated with the work of others. More than ever, work is work with others and work for others: it is a matter of doing something for someone else. Work becomes ever more fruitful and productive to the extent that people become more knowledgeable of the productive potentialities of the earth and more profoundly cognizant of the needs of those for whom their work is done ... In our time, in particular, there exists another form of ownership which is becoming no less important than land: the possession of know-how, technology and skill. The wealth of the industrialized nations is based much more on this kind of ownership than on natural resources (CA, n. 31-32).

As a consequence of this, Pope John Paul II emphasized the importance of *freedom* as a gift of God to man (Buttiglione, 1992). A free man is called to increase his personality by cultivating his relation with God. He must “*subordinate his material and instinctive dimensions of his interior and spiritual ones*” (CA, n. 36). In fact, the aim of human life is not to accumulate wealth, i.e. having more, but to concretely experience the Christian promises of beauty, goodness and communion with others, i.e. being more. Therefore, in *Centesimus Annus*, human freedom is never conceived as unlimited (as in liberalism) but as an instrument that a human person must use “*as a co-operator with God in the work of creation*” (CA, n. 37). Pope John Paul II actually rejected any form of economic system that causes an institutional, juridical or political vacuum (CA, n. 48). Secondly, he maintained the *creative subjectivity* of the intermediate bodies in economic and political dynamics. In fact, Pope John Paul II argued that the development of human society is related to the application of principles of subsidiarity, solidarity and responsibility in people’s behaviours in the same manner that occurs in

personal relations within families, associations and groups. This means that society improves if we give room for the construction of a balanced social architecture and mainly if we invest time and resources in teaching and testifying the practice of good customs to every person (CA, n. 35). We cannot thus agree with those scholars who affirmed that in *Centesimus Annus* there is a full embrace of capitalism. In fact, Pope John Paul II stated:

The historical experience of the West, for its part, shows that even if the Marxist analysis and its foundations of alienation are false, nevertheless alienation –and the loss of the authentic meaning of life– is a reality in Western societies too. This happens in consumerism, when people are ensnared in a web of false and superficial gratifications rather than being helped to experience their personhood in an authentic and concrete way. Alienation is found also in work when it is organized so as to ensure maximum returns and profits with no concern whether the worker, through his own labour, grows or diminishes as a person, either through increased sharing in a genuinely supportive community or through increased isolation in a maze of relationships marked by destructive competitiveness and estrangement, in which he is considered only a mean and not an end. (CA, n. 41)

Pope John Paul II clearly expressed a total rejection of Eastern planning economies and communist dictatorships, while more softly criticising the Western system of the free market economy and political democracy, but he never expressed a preference for a political and economic system because, in his opinion, Catholic social doctrine “*is not a ‘third way’ ... it constitutes a category of its own*” (CA, n. 41). In fact, his trouble is in

the flourishing of the human capital of every person. This basically depends on the diffusion of an *ordered* conduct of a person's life grounded on the un-reducible value of the human person and supported by the friendship with Christ risen again.

3. Human Capital in the American Neo-Conservative School

The Catholic Neo-Conservative school has promoted an economic approach aimed at developing a partnership between Catholic ethics and the free market (Novak, 1993) in an attempt to develop Pope John Paul II's pronouncement:

It would appear that, on the level of individual nations and of international relations, the "free market" is the most efficient instrument for utilizing resources and effectively responding to needs. But this is true only for those needs which are "solvent", insofar as they are endowed with purchasing power, and for those resources which are "marketable", insofar as they are capable of obtaining a satisfactory price. But there are many human needs which find no place on the market. It is a strict duty of justice and truth not to allow fundamental human needs to remain unsatisfied, and not to allow those burdened by such needs to perish. It is also necessary to help these needy people to acquire expertise, to enter the circle of exchange, and to develop their skills in order to make the best use of their capacities and resources. Even prior to the logic of a fair exchange of goods and the forms of justice appropriate to it, there exists "something which is due to man because he is man", by reason of his lofty dignity. Inseparable from that required "something" is the possibility to survive and, at the

same time, to make an active contribution to the common good of humanity (CA, n. 34).

However, the Catholic American Neo-Conservative school was born as a current branching of the bigger Neo-Conservative intellectual movement promoted in the Sixties by Irving Kristol³⁵⁸ (1957). This Jewish scholar argued (1972) that human values deriving from *Biblical anthropology* could never be connected to leftist ideologies (Gerson, 1996). In fact, for Kristol (1995), every socialist thought basically wants to build a perfectly equal community³⁵⁹. But this constructivist dream is never realisable because society is constituted of human persons who exercise an unpredictable freedom in making their choices, as the Austrian school of economics had clearly just proved. Therefore, the only solution for attaining a just economic and political system is a *cultured civilization* (Niebhur, 1944). Only those who are educated in the practice of ethical virtues can transform a free social context into a morally good one. It was along these lines that Fr Richard Neuhaus³⁶⁰, a Protestant priest who converted to Catholicism, wrote a column for many years called “The Naked Public Square: Religion and Democracy in America” in the review *First Things*. He explained that the American constitutional right to the *search for happiness* had to be made in reference to an *integral* conception of the human being, including his religious sense (Gaustad, Schmidt, 1974). Neuhaus identified the real and deep confront between people of different faith as the proper instrument of the peaceful development of society from all points of view (Felice, 2005). This dialogue had not only to deal with abstract themes but it also had to take place with regard to ethical, political and economic topics.

³⁵⁸ Irving Kristol (1920–2009) was the founder of the American Enterprise Institute in Washington D.C.

³⁵⁹ As a consequence, Kristol abandoned the Democratic Party which he belonged to and founded the think-tank called the *American Enterprise Institute* in Washington DC, which would become the cultural staff of Ronald Reagan’s presidency. The same change was operated by Michael Novak, Gertrude Himmelfarb, Daniels Bell, Norman Podhoretz, Midge Decter and Moynihan Daneels. We must underline that Novak’s decisions are particularly important for the Catholic cultural world. In fact, American Catholics were usually supporters of the Democratic Party because they were often immigrants who viewed in the message of social equality the possibility of their human liberation. But Novak argued that the *non-negotiable values* of the Christian faith can be better defended by the Republican Party than the Democratic one (Montanari, Sandonà, 2010).

³⁶⁰ Richard Neuhaus (1936–2009)

Finally, we may say that, in developing their framework, the Catholic Neo-Conservative school have tried to combine the insights of thinkers like Jacques Maritain (1944) and John Courtney Murray S.J. (1960), representing a Thomist philosophical approach regarding the relation between Catholicism, democracy and a free enterprise economy, with those of figures like Alexis de Tocqueville (1835–1840), Ludwig von Mises (1927) and Friederick von Hayek's (1960) on the ethical foundation of liberalism.

Michael Harrington, a socialist thinker, ironically described the Kristol's group of intellectuals as "Neo-Conservative" to distinguish it from Russell Kirk's³⁶¹ traditional conservative one (Respinti, 2010). However, as Novak has explained (2003), the Neo-Conservatorism was identifiable for the Biblical conception of human nature but not for its religious background, because there are Jews, Catholics and Protestant members. American Neo-Conservative scholars promoted a vision of economics where human beings are *creative, free and responsible* persons in a free social context. In this view, as Novak stated in his 1996 *Business as a Calling*, human capital is substantially based on:

- i - The practice of *civic virtues*, such as honesty, kindness, punctuality, worthiness, trust, austerity, generosity, simplicity, gifts;
- ii - The valorisation of the *mind's capacities*, such as the capacity of creation, improvement, and innovation;
- iii - The fulfilment of a *working vocation* that everyone understands as being apt for his historical socio-economic conditions and his personal features and interests.

This approach tries to unify the economic efficiency of liberalism *à la von Hayek* and the respect of human dignity of the Biblical tradition. George Weigel –official biographer (1999) of Pope John Paul II and one of the most prestigious exponents of this school of thought– synthesized (1994) the novelty of the American Neo-Conservative movement in the re-discovery of the constitutive connection between Christianity and Judaism, the sustainment of public confrontation of cultural traditions in public sphere, the banning of any form of abortion, the valorisation of the welfare

³⁶¹ Russell Kirk (1918–1994)

society system and the defence of the Catholic just war tradition³⁶². On the other hand, the topic of human capital was significantly developed by Novak, who was in favour of capitalism and at the same time adopted the concept of person and the paradigm of analysis of “homo agens”. He developed the argumentations of Maritain’s 1944 *Christianity and Democracy* and of John Courtney Murray S.J.’s 1960 *We Hold these Truths*, where the political and economic experience of the USA are positively judged. In the USA, many Americans and many immigrants have found a good job, have received good wages, have got on with their careers and have also been able to cultivate the *spiritual aspect* of their life. This fact thus inspired Novak’s 1982 work called *The Spirit of Democratic Capitalism*, which marks the history of economics and political philosophy (Reale, Antiseri, 2002, p. 865–870). Here, the author introduced an architecture of society structured according to the principal of *realism*. Novak rejected any illusory utopia of constructivist and perfectionist systems by preferring to divide social life into three spheres:

- i - *Capitalism* as a social market where entrepreneurship is stimulated. This is connected to the person’s *economic freedom*;
- ii - *Democracy* as a series of procedures directed to guarantee civil rights and duties. This is connected to a person’s *political freedom*;
- iii - The *moral–cultural consensus* among the set of values which might animate all human behaviours in society. This is connected to a person’s *cultural and religious freedom*.

This last competent has always been indicated by Novak as the hub of the whole system because the religious, moral and ethical values diffused in the population shape the informal rules of commercial trade. Nevertheless, the coincidence between Jewish, Protestant and Catholic values is not so obvious. We know that Catholicism contrasts with Judaism in its belief of God’s incarnation in the figure of Christ, which reveals the meaning of the Scriptures, and with Protestantism for the belief that the Church is the

³⁶² The 2003 American military attack against Iraq by George Washington Bush was strongly criticised by Pope John Paul II. In our opinion, this fact has changed the good political relationship between the United States and the Catholic Church that was mainly established by Ronald Reagan’s presidency and has implied the reduction of American intellectuals’ influence in the determination of the Church’s cultural positions.

place where Christ is alive and the Pope is his vicar. These differences are *decisive* for understanding that Catholic moral and ethical values are founded on a Christocentric vision of reality (Moioli, 1978). In other words, we want to affirm that there are many common values between Catholicism and Judaism and Catholicism and Protestantism but we cannot risk confusing the distinct profiles of the three religions. Secondly, Novak's proposal lacks valorisation of the *social aspects* of a person's nature. Novak has not strongly praised the role of intermediate bodies in the integral upbringing of persons. This hides an individualist version of personalism according to which a person participates in the community for some type of profit and thus achieves from the community what she wants. Instead, experience proves that the input of a person into a community is usually for self-interest or self-attraction –as Novak argues– but within the community a person can change her purposes and, anyway, does not only influence the community's decisions but her behaviour is also influenced by community.

4. Human Capital in the American Personalist School

This American Catholic personalist school was born in the sixties but mainly developed during John Paul II's papacy as an attempt to implement the dramatic (not tragic) anthropology of human life in economics (Danner, 2002). These economists are usually members of the "Association for Social Economics" and writers in the "Review for Social Economics", the "Forum for Social Economics" and, more recently, the "Journal of Markets and Morality". They proposed an original economic theory grounded on the anthropological paradigm of the "acting person". Within this school of thought, we can distinguish the senior partners of Peter Danner³⁶³, Edward O'Boyle and William Waters from scholars who have mixed this approach with others, such as Father Robert Sirico, John Davis and Daniel Finn³⁶⁴.

However, Danner was somehow the founder because he put forward (1980) the basis for an economic pattern as an alternative to mainstream as well as to traditional Catholic personalism. The difference to the mainstream lays in the adoption of the concept of

³⁶³ Peter Danner (1921–2008)

person and the paradigm of “homo acting” than respectively that of individual and of “homo economicus”, while the difference to traditional Catholic personalism consists in the approach being more focused on the person’s *moral dimension* of managing their economic means³⁶⁵ to obtain her purposes than on the orientation of community’s policy for attaining the common good (Waters, 1988). Obviously, Danner agreed with traditional Catholic personalism and Catholic social doctrine regarding the *integral* anthropological conception of the human being as a free, responsible and creative person, but emphasized the character of the economic *dynamism* of human actions. As Pope John Paul II stressed that the journey of man towards the meeting with the truth of Christ’s person was possible through the Thomist “static” method of exploring existing reality as well as through the phenomenological “dynamic” method of knowing the essence of facts which occur, likewise Danner affirmed:

Individual values are also dynamic in that they are not only “norms” for judging the goodness of an object ... but “purposes” and “goals” for overt action. (1974, p. 22-23)

For American personalist school economics is thus a *value-landed* science and a set of normative indications. The framework of reference is constituted by the application of the “*moral virtues of moderation, justice and love*” (Danner, 1961, p. 101). This pattern was practically applied by O’Boyle to the topic of human capital. On April 3rd 2009 he was invited to the *Studium Generale Marcianum* of Venice and dedicated an entire lecture to “The Acting Person and Personalist Capital”. O’Boyle explained that three types of human action exist:

³⁶⁴ We can more precisely affirm that Sirico also praises the Neo-Conservative perspective, Davis is more careful in destroying the “homo economicus” paradigm than to assume another paradigm, and Finn maintains an Aristotelian-Thomist approach.

³⁶⁵ Danner in the analysis of moral action used a cybernetic self-referentiality.

- i - The first level refers to human action realized as an exercise of human *physical liberty*. It deals with survival actions that animals can also carry out, such as to eat something that is available and near to the hungry person (or animal);
- ii - The second level refers to human action realized as an exercise of human *intentional liberty*. It deals with actions that require the employment of morally acceptable means for achieving a desired end, such as to send a curriculum vitae to the human resources offices of firms to find a job;
- iii - The third level refers to human action realized as an exercise of human *participative liberty*. It deals with actions associated with self-determination that makes one a better person, such as to spend time speaking with the other members of the family exclusively because this produces moral good in the person.

As a consequence of this, O'Boyle stated:

As long as a child acts only at the first or second level, he/she remains an "innocent" person. Once he/she begins acting at the third-level that child becomes a "person in action" ... The child may become an evil person or a good person according to how he/she acts in a lifetime. The child becomes an evil person by embracing vices (bad habits such as acting unjustly, acting maliciously), a good person by acquiring virtues (good habits such as acting courageously, acting justly). Personhood can be affirmed or denied, granted or taken away, conditional or unconditional. By representing the economic agent as instrumentality, as a means to an end with a fundamental worth that derives from the contribution made to economic affairs, mainstream economics in effect makes the personhood of the economic agent conditional ... Personalist economics insists that

every human being is endowed with a sacred dignity that is separate and distinct from his/her instrumentality, a dignity that cannot be denied, taken away, or rendered subordinate to instrumental value. The personhood of the economic agent is unconditional. (2009, p. 2-3)

The personalist idea of human capital developed Genovesi's concept of "educazione" by outlining the importance of metaphysical acknowledgment of human dignity for the wide diffusion of the practice of good habits and civic virtues in political and economic affairs. Nevertheless, we can affirm that O'Boyle's approach (1996) is more microeconomic than Genovesi's one because the former believes that every person chooses to act either virtuously or viciously, whereas the latter holds that the influence of cultural values of the social community are almost decisive for every person's behaviour. Secondly, O'Boyle's approach (1998) is centred on the concept of a person's *self-control*. On purpose, he affirmed:

No employer wants a worker who cannot limit his drinking (overindulgence) or one who steals (takes too much). No one wants to work for an employer who sweats his labour (pays too little) or with others who shirk their responsibilities (do too little). No consumer respects a merchant who deliberately misrepresents the quality of the goods for sale (gives too little) or does not fully disclose interest charges on credit purchase (takes too much). No merchant wants a customer who promise to pay the balance owed later but doesn't follow through (takes too much) or who insists on being served before everyone else (demands too much) ... In general, employers prefer the diligent worker to the lazy worker, the stand-up guy to the wimper.

Buyers favour the merchant who is always honest to one who is devious, the merchant who gives sound advice to one who simply doesn't know his/her product line or worse yet cheats his/her customers. These preferences are expressed and the personalist capital of a specific economic agent is rewarded (imperfectly because economic agents are not perfect human persons) through routine exchanges in the product market where price, quality, and terms of service after the sale are determined and in the resource market where resources prices including wages are determined along with hours of work and working conditions. (2009, p. 4-5)

Secondly, for O'Boyle, human capital is accumulated by good actions as material capital is accumulated by the sum of productive means, but the former cannot be judged through instruments of economic analysis used for the latter. Human capital is not a *transferable* stock of wealth because it is not something distinct and separate from its owner. The virtues of justice, moderation, beneficence, courage and spirit of creation are basically related to the nature and upbringing of every person (Ratnapala, 2006). In fact, human capital is embedded in every human being and cannot thus be sold or bought to the point that if we want to benefit from one's human capital we must employ him in our firm. Finally, O'Boyle rejected Becker's attempt (1996) of improving his famous microeconomic model grounded on a utility maximisation function by including the personal habits and addictions, peer pressure, parental influences on the tastes of children, advertising, love and sympathy and so forth. O'Boyle explained that Becker's anthropology *exclusively* contains actions of the first and second level. This is confirmed by the fact that Becker has continued to use the concept of the individual and the paradigm of "homo economicus" as well as to deny the relevance of the *self-determination* capacity in a person's actions that characterize human participative liberty (action of the third level). The point, in O'Boyle's view, is that

as with all mainstreams economists, Becker in the end asserts that an economy functions best when it maximizes utility, when it achieves Pareto optimality. Libertarians are likely to argue that an economy functions best when it maximizes human freedom. Personalist economics, in contrast, claims that an economy functions best when it maximizes personalist capital thereby enhancing a human being as a human person and rendering that person more effective and more highly valued as an economic agent. (2009, p. 7)

5. Human Capital in the Italian School of Civil Economy

The Italian school of civil economy elaborated a thought that shifts the intellectual horizon of economic theory away from the mainstream literature by arguing for the *interactive* feature of human rationality and the *value-landed* epistemology of economics. In fact, these scholars have developed a theoretical and empirical pattern which connects intellectual sources in economics, politics and morality. The Italian school of civil economy is basically related to the Aristotelian-Thomist organic vision of society and to the Humanist tradition –especially in the late medieval and early Renaissance periods in Italy– of the dynamism of civil society and economic institutions. However, we can more recently find the same framework of social engagement in the charisma of the Focolarini movement. Chiara Lubich³⁶⁶, the founder of this Catholic group in 1943, proposed a journey of Christian experience grounded on the ecumenical unity between believers and unbelievers of diverse generations, cultures and faiths. From this perspective, the human community plays a fundamental role in the flourishing of every person’s human capital³⁶⁷.

³⁶⁶ Chiara Lubich (1920–2008)

³⁶⁷ This was the reason as around the Focolarini movement have been formed many social realities, such as the “Città Nuova” publisher, the international cultural centre of Loppiano, the experiences of the “economy of communion” and of the “international cooperation for unity.”

The civil economy etymologically derives from the Latin *civitas*, which is the translation of the Greek *polis*. As these authors pointed out, happiness rather than utility deserves to be the focus of an economic discourse, which claims to be scientific because happiness is the main determinant of human motivation; they argued that happiness must necessarily be public because the people's practice of civic virtues constitutes the preconditions for it. Indeed, Richard Easterlin³⁶⁸ empirically proved (1974) that the person's happiness grows in relation to the growth of the person's income until a certain point and then paradoxically diminishes. This demonstrates that a person's happiness has some individual aspects related to the amount of income received as well as some social aspects related to the performance of social norms and conventions and to the cultivation of human relations. Consequently, happiness cannot be measured through the paradigm of utility, which indicates the relation between a man and a thing, but needs a wide paradigm of satisfaction, which describes whether and how commodities get transformed into personal well-being. This last paradigm also takes account of non-tuistic behaviours which provide immaterial personal happiness, such as the *fraternity* and *voluntarism* testified by the positive experiences of the third or *non-profit sector*.

However, this school of thought found a systematic alternative outlook on economics in the 2004 book *Economia Civile. Efficienza, Equità, Felicità Pubblica* of Bruni and Zamagni³⁶⁹. Here, the authors illustrated a society where mercantile exchange, equity of redistribution, and free and trustworthy reciprocity can coexist efficiently. The economic literature usually separates the commercial relations from the social ones, by referring to the former as instrumental relations which are substantially broken in the moment of exchange of equivalents (principle of equivalence) and to the latter as the civil relations which are characterized by *cooperation* (principle of proportionality). Zamagni thus distinguished between markets *à la Darwin* based on positional competition and on the Shermin Rose's³⁷⁰ super-star effect and civil markets where "*the distances of economic agents tend to be reduced*" (2007, p. 24). In fact, utilitarianism,

³⁶⁸ Richard Easterlin (1924–)

³⁶⁹ This book has been translated into English as *Civil Economy: Efficiency, Equity, and Public Happiness*.

³⁷⁰ Shermin Rose (1938–2001)

positivism and consumerism have historically provoked the end of *civic humanism* whose special feature was

*the profound unity between “caritas” and the economy, between gift and contract in those experiences near the rise of markets*³⁷¹
(Bruni, Zamagni, 2004, p. 32).

As a result, the anonymous and impersonal market “society” was replaced by the person-centred pre-modern “community”. Civic humanism was not only a theory but also a common practice. It is sufficient to mention the *Montes Pietatis*. These old credit institutes did not work in the logic of monetary incentives but in a perspective characterized by reputation, trust, solidarity and horizontal subsidiarity (Ferlito, 2009). The cultural substratum of these institutions was constituted by Christian *reciprocity* (Bruni L., 2008). This principle was somehow missed in current economics by causing the undervaluation of the importance of *relational goods* for a person’s happiness and human capital flourishing (Gui, Sudgen, 2005). Reciprocity implies

*a series of bi-directional transactions, which are at the same time independent and connected among them*³⁷² (Bruni, Zamagni, 2004, p. 166).

Consequently, reciprocity possesses a character of transitivity and thus normally almost provides a triadic pattern: I, you and the other. Society survives and improves if reciprocity, which is buried in the heart of every human being, is unearthed and made to work (Bruni L., 2006). Irrational ignorance and fear can prevent that from happening.

³⁷¹ The original Italian quotation is “*La profonda unità tra la “caritas” e l’economia, tra il dono e il contratto in quelle esperienze di quasi-mercato.*”

Anyway, on this point the Italian school of civil economy emphasized the role of a person's human capital of rationally acting according her real nature of social being (Bruni L., 2007). In other words, for Bruni and Zamagni an integral upbringing of a person involves the practical learning of behaviours of reciprocity.

6. Human Capital in Pope Benedict XVI

It is universally recognized that Joseph Ratzinger is one of the most important systematic (not moral) theologians in the Church's history. But, as he himself has confessed (2000, p. 17), he is not a professional expert in Catholic social doctrine (Finn 2009a, p. 1) but in the questions of the Trinity, Christology, Holy Scripture and Ecclesiology. Therefore, in the economic sections of *Caritas in Veritate* (2009), the influence of the Italian school of civil economy is clear. But that does not mean that the Pontiff was forced to affirm that which he did not want to affirm, all the more so if one knows Pope Benedict's moral stature and sense of responsibility (Finn, 2010a, p. 2–3).

In any case, we can affirm that Pope Benedict XVI detailed, in an insuperable way, the notion of Christian anthropology in the introduction of his social encyclical. Here, he explained the divine nature of *caritas*. This word indicates the real love that does not have a sentimental character but comes objectively from divine grace, a free and gratuitous gift of the Creator to his creature in Christ's incarnation. Human persons can only love others as a reflexive consequence of God's love towards them (CV, 1–9). In Michael Novak's view (2009), this reflection means that gratuitousness should be represented by the attitude of the human soul within every activity. In this way it is possible to understand that human merits and human cares have to be rewarded as well as entrepreneurial profit legitimated (CV, 47). Novak especially liked Pope Ratzinger's stress on the decisive contribution of the subsidiarity principle in order to create a just economic order, as is elucidated in Benedict XVI's statement below:

³⁷² The original Italian quotation is “*Una serie di transazioni bi-direzionali, che sono contemporaneamente indipendenti e interconnesse tra loro.*”

A particular manifestation of charity and a guiding criterion for fraternal cooperation between believers and non-believers is undoubtedly the “principle of subsidiarity”, an expression of inalienable human freedom. Subsidiarity is first and foremost a form of assistance to the human person via the autonomy of intermediate bodies. Such assistance is offered when individuals or groups are unable to accomplish something on their own, and it is always designed to achieve their emancipation, because it fosters freedom and participation through the assumption of responsibility. Subsidiarity respects personal dignity by recognizing in the person a subject who is always capable of giving something to others. By considering reciprocity as the heart of what it is to be a human being, subsidiarity is the most effective antidote against any form of all-encompassing welfare state. It is able to take account both of the manifold articulation of plans –and therefore of the plurality of subjects– as well as the coordination of those plans. Hence the principle of subsidiarity is particularly well-suited to managing globalization and directing it towards authentic human development. (CV, n. 57)

Pope Benedict XVI re-discovered the richness of the concept of the human integral development of every person and every community which was introduced into Catholic social doctrine by Pope Paul VI in *Populorum Progressio* (1967). In *Caritas in Veritate* we can find some concrete applications of human integral development, such as the cultural explanation of reasons for the banning of any type of abortion and unnatural family planning (CV, 28); the establishment of the connection between freedom of religion and economic development (CV, 29); the sustainment of the constitutive and

unavoidable link between ethics and the economic, social and political system (CV, 34); the proposal of the creation of a world political authority; the endorsement of a new type of enterprise having some characteristics of profit making and some other aspect of non-profit (CV, 37); the adoption of “communion economies” on a large scale and the inducement to back the Third World’s development by “quotas of gratuitousness” (CV, 39); and the centrality and the integrity of the family founded on marriage between a man and a woman (CV, 44). However, in *Caritas in Veritate* we can also identify some points strictly related to Pope John Paul II’s personalism. For instance, Pope Benedict XVI referred to a person’s human capital by stating:

“Justice must be applied to every phase of economic activity”, because this is always concerned with man and his needs. Locating resources, financing, production, consumption and all the other phases in the economic cycle inevitably have moral implications. “Thus every economic decision has a moral consequence.” (CV, n. 37)

And some successive paragraphs continued:

Business activity has a human significance, prior to its professional one. It is present in all work, understood as a personal action, an “actus personae”, which is why every worker should have the chance to make his contribution knowing that in some way “he is working ‘for himself’.” (CV, n. 41)

As a consequence of this work, we do not agree with those scholars who have argued that a shift has occurred between the social thought of Pope John Paul II and of Pope Benedict XVI (Weigel, 2009), such as the favour of the former for capitalism and the preference of the second for a “third way” system focused on state intervention and third-sector centrality. In fact, they draw from the encyclical text of the two Popes one or two lines and read them outside the context where they are inserted. If we use this method we can also demonstrate that Pope John Paul II was against capitalism because he had advised that the adoption of the free market economy contained the risk of reducing the human persons so as to make them exist “*on the same level as the whole complex of the material means of production*” (LE, n. 7) while Pope Benedict XVI is contrary to distributive justice because he eliminated the formula of social justice with “a preferential option for the poor” in *Caritas et Veritate*. However, no one can judge Catholic social doctrine and, in general, the Church’s teaching using the conflicting categories of politics or economics. For every Pope there is comprehensive integration among the *salvation* deriving from Christ’s incarnation and resurrection and all issues of human life, such as procreation, biomedical discoveries, work, leisure, production, consumption, justice, and safety of the environment. That means that Christian life touches all dimensions of reality (individual, social and institutional) and that development has not only an economic aspect, but a moral one too. Pope Benedict clearly explained the impossibility of dividing human life into separate pieces, because human nature originally has, as well as the whole of created nature, a unitary character and a “‘*grammar*’ which sets forth ends and criteria for its wise use, not its reckless exploitation” (CV, n. 48). In this regard, we approve the proposal of Pope Benedict’s view of human capital according to the natural-law tradition but in a new “dynamic” modality. As Thomas taught, an internal logic exists inside natural structures from which one could discover principles for proper action and, as Wojtyła taught, the person meets the deep truth contained inside reality by freely carrying out “proper action”.

7. Conclusions

Human capital in the last twenty years of history of Catholic social thought has maintained a *qualitative* profile. In fact, human dignity is ontologically non-reducible to any type of calculation because it is a feature of being a person and not of her having or making. From this perspective we can argue that a *unity* of analysis among Pope John Paul II, the American Catholic Neo-Conservative school, the American Personalist school, the Italian school of civil economy and Pope Benedict XVI exists. However, we do not intend to neglect their differences, which sometimes are very deep. On the one hand, we can distinguish between Novak's and Weigel's endorsement of a free market economy that is ethically founded where persons *virtuously act*, on the other hand, Danner's and O'Boyle microeconomic stress on the *morality* of human behaviours from the perspective of a person's self-determination, and in another, Bruni's and Zamagni's maintaining of a person's practice of *reciprocity* in a social context characterized by trust, spirit of community, fraternity and cooperation. Secondly, we can distinguish between an economic thought of Pope John Paul II, who confirms the statement of tradition of the Church's social teachings and at the same time originally emphasizes the strict correlation between human *freedom* and human *responsibility* in the moment of a person's action and a thought of Pope Benedict XVI, who particularly re-discovers the Thomist tradition of the *moral natural law* of Social Catholicism and the concept of *human integral development* of Pope Paul VI, and gives them a perspective of evolutionary economics through the valorisation of Pope John Paul II's *personalism*.

Conclusioni

Il nostro lavoro è stato scritto seguendo una linea tendenzialmente *cronologica* delle scuole di pensiero che hanno esaminato la tematica del capitale umano. A salvaguardia di questo criterio storico abbiamo sempre indicato nel testo principale la data della *prima edizione* delle opere menzionate, mentre in bibliografia abbiamo precisato quale edizione abbiamo personalmente avuto modo di consultare. Tuttavia, abbiamo derogato a questa regola per non incorrere in *salti logici* in relazione al personalismo economico e agli approcci alternativi al marginalismo. Siccome abbiamo già redatto una conclusione sintetica per ogni capitolo della tesi, a parte quello costituito da un solo paragrafo riguardante il marxismo, terminiamo adesso con una *tassonomia* per comparare più nella sostanza le differenti concezioni antropologiche analizzate.

Le prime categorie contrapposte di riferimento riguardano la definizione di *educazione* fornita dagli autori. Possiamo distinguere tra un'idea di capitale umano come:

- 1) *stock* di *conoscenze tecnico-operative* acquisibili dall'uomo tramite l'istruzione e la formazione professionale;
- 2) *educazione integrale* dell'uomo intesa sia come insieme (non stock accumulativo) di conoscenze tecnico-operative che come introduzione a un significato metafisico della realtà in base al quale il soggetto umano identifica la *vita buona* per sé e per l'intera comunità cui appartiene.

A grandi linee possiamo affermare che la prima accezione di educazione è tipica della *cultura anglosassone* (Blaug, 1966a). Tanto è vero che negli scritti economici in lingua inglese abbiamo trovato alquanto raramente il termine “upbringing” che definisce la seconda accezione del concetto di capitale umano. Del resto, una visione dell'educazione esclusivamente in termini di istruzione e di formazione professionale si addice maggiormente a una filosofia sociale *individualista* (Smith, 1759) e a uno schema di valutazione delle decisioni di tipo *utilitarista* (Bentham, 1789). Smith è noto per essere il “padre dell'economia” perché, come abbiamo visto, formula per primo il paradigma dell'“homo oeconomicus”. In questa prospettiva ripresa dai marginalisti

inglesi Jevons (1871), Sidgwick (1883) e Marshall (1890), l'essere umano è inteso come un soggetto privo di emozioni, sentimenti, valori e perfettamente razionale nella determinazione delle sue scelte. Fuor di metafora, si tratta di un *individuo* umano, cioè di un esemplare della "razza umana", che, pur essendo dotato di caratteristiche proprie, risponde a determinati stimoli ed incentivi *esattamente* nello stesso modo degli altri uomini. In pratica la scuola classica inglese (Smith, 1759) introduce un individuo *standard*, "programmato" sul criterio di scelta della massimizzazione della sua "*approbation*", cioè il piacere di essere invidiato. Attraverso questo modello-tipo possiamo prevedere e comprendere i comportamenti di tutti gli altri individui. Questa concezione di capitale umano viene approssimativamente formalizzata da Chadwick (1862) mentre raggiunge il suo apice nella teoria matematico-statistica della scuola di Chicago (Mincer, 1958; Schultz 1961a and 1961b; Becker, 1964). D'altra parte, ci è noto che ogni generalizzazione è fuorviante. Infatti, J.S. Mill è un importante classico inglese che ha teorizzato (1848) una configurazione dell'economia come ramo delle scienze sociali in una visione *unitaria* con la politica, la sociologia, la filosofia. Inoltre, ha sostenuto (1859a) l'importanza di una formazione umanistica del soggetto umano attraverso, per esempio, lo studio della filosofia, della letteratura e delle lingue straniere. J.S. Mill si avvicina (1859b and 1863), dunque, alla concezione antropologica *integrale* contenuta negli scritti dei classici italiani, degli economisti personalisti e dei Papi. Nonostante il fatto che i classici italiani promuovano una economia civile influenzata dal pensiero illuminista mentre i personalisti e i Papi sviluppino un'economia sociale di orientamento aristotelico-tomista, per tutti, al di là delle sfumature, l'essere umano è una *persona* unica, irripetibile, inalienabile, ontologicamente completa (Scola, Marengo, Prades López, 2000). La persona, inoltre, è dotata di libertà e creatività, è influenzata da emozioni, sentimenti, valori, ideali, esperienze religiose ed è capace di dar conto responsabilmente delle proprie azioni. Il concetto di persona implica una natura *relazionale* che si esplica sia nel rapporto del soggetto umano con Dio sia nel rapporto sociale con gli altri membri dei corpi intermedi sia della società intera (Donati, 2009). Di conseguenza, nella prospettiva personalista il paradigma di analisi diviene l'"*homo socio-oeconomicus et agens*". L'aggettivo "*socio-oeconomicus*" è di derivazione scolastica e sottolinea l'influenza determinata dalla natura relazionale della

persona nel suo modo di agire mentre l'aggettivo “*agens*” è di derivazione marginalista austriaca e indica il fatto che attraverso i gesti dell'esercizio della propria libertà la persona esprime la sua essenza (Sirico, 1998). Infine, con il personalismo economico il criterio di determinazione delle scelte personali e comunitarie si basa sulla filosofia aristotelico-tomista che canalizza le azioni di ognuno verso il *bene comune* (Solari, 2007).

Le seconde categorie contrapposte di riferimento riguardano la *finalizzazione* della crescita del capitale umano. Possiamo distinguere tra un orientamento dello sviluppo del capitale umano della popolazione come:

- 1) *strumento di controllo sociale*;
- 2) *fattore di sviluppo organico della società*;

La prima configurazione è ben presente in Smith (1776) che esorta a diffondere l'educazione in tutti gli strati sociali per evitare tumulti e ribellioni della popolazione. Questi è a conoscenza del fatto che l'istruzione rendeva i lavoratori più consapevoli del loro ruolo nel processo produttivo e, quindi, li poteva far divenire più risoluti in fase di contrattazione lavorativa, ma pensava che allo stesso tempo l'istruzione li rendesse capaci di agire in modo più ponderato e prudente (Blaug, 1066b). Da parte sua, Ricardo individua (1817) nell'istruzione un fattore utile per allocare e distribuire le risorse economiche tra le popolazioni. Infine, Malthus ritiene (1830) che l'educazione sia uno strumento per diffondere i metodi riguardanti il controllo demografico. Nella stessa direzione si collocano riguardo a questo aspetto gli economisti classici liberali francesi e i marginalisti austriaci. Essi sostengono la preferibilità del *capitalismo* e dell'economia di mercato al *socialismo* e all'economia pianificata. Partendo da un dettaglio dei fattori psicologici e sociologici del capitale umano (von Hayek, 1952b) di ogni soggetto umano in azione mediante un'analisi prasseologica (von Mises, 1949), in particolare dell'imprenditore (Say, 1803; Schumpeter, 1914), essi dimostrano che solo un sistema economico libero e aperto garantisce benessere e stabilità sociale (von Hayek, 1960). Ma professando il liberalismo, paradossalmente, sostengono la controllabilità sociale degli *egoismi* dei singoli individui, poiché non associano alla libertà economica la *responsabilità etica e morale* di ogni azione (Rusconi, Monti, Alford, 2010). In

proposito, il cardinal Pavan distingue (1947) tra proprietà privata e *proprietà personale* e tra libertà economica e diritto alla *libertà di iniziativa economica personale*. Del resto, la scuola classica italiana e il personalismo non sostengono mai lo sviluppo del capitale umano per questioni di sicurezza sociale né di efficienza economica. Bensì la loro preoccupazione è riposta nella volontà di creare un'*armoniosa e interclassista* convivenza sociale basata sulla *fiducia*, la *reciprocità* e il *dono* (Verri, 1763; Lampertico, 1874; Vito, 1949). Per questo il capitale umano è ritenuto pressoché inscindibile dal *capitale sociale* (Genovesi, 1765). L'uno e l'altro si completano e integrano a vicenda poiché la persona è concepita come un essere contemporaneamente individuale e sociale così come la società è costituita contemporaneamente dal protagonismo delle singole persone e da quello dei corpi intermedi. In questa prospettiva si inserisce la promozione del bene comune da parte delle *istituzioni* politiche, culturali e sociali affinché si diffonda nel popolo una cultura di valorizzazione della pratica delle *virtù civiche* ispirate dai valori etici, morali e cristiani (Toniolo, 1898-1913).

Le ultime due categorie contrapposte di riferimento riguardano la concezione di capitale umano come:

- 1) *investimento in risorse immateriali*;
- 2) *interiorizzazione di valori etici e morali*.

Fondamentalmente lo spartiacque pone, da una parte, la prevalente letteratura economica di matrice anglosassone e gli economisti che hanno proposto i metodi retrospettivi e prospettivi di valutazione del capitale umano e, dall'altra, la scuola classica italiana, il personalismo, la Dottrina Sociale della Chiesa e anche la scuola del *capabilities approach*. All'interno del primo gruppo possiamo distinguere tra un capitale umano inteso come un investimento a livello *macroeconomico* (Solow, 1957, 1959, 1962; Denison, 1962; Aukrust, 1959; Arrow, 1951) e un altro considerato a livello *microeconomico* (Becker, 1964; Lucas, 1988). In entrambi i focus, tuttavia, la nozione di investimento è applicata rigidamente mediante il calcolo dell'ammontare delle risorse finanziarie impiegate in istruzione e formazione professionale aumentato dal costo-opportunità dei redditi che sarebbero stati percepiti se si fosse lavorato, la suddivisione

in quote di ammortamento del costo totale (congetturando una certa vita utile), la stima di un tasso di rendimento dell'investimento, e, quindi, la determinazione di un valore attuale netto dell'investimento effettuato. Questo è il modello-base che può essere raffinato con altre variabili, come la possibilità percentuale che un individuo può statisticamente stimare circa il fatto di essere vivo e occupato quando raggiungerà una certa età (Dublin, Lotka, 1930; Weisbroad, 1961). Ma, in ogni caso, ciò che concettualmente emerge è l'operazione di *assimilazione* tra il capitale umano e il capitale materiale, tra l'uomo e la macchina. In antitesi, possiamo identificare un approccio matematicamente meno elegante ma sostanzialmente più realista. I classici italiani, i personalisti, la Dottrina Sociale della Chiesa e anche Sen (1997) ritengono che investire in capitale umano sia diverso da investire in capitale materiale perché la qualificazione del primo, cioè il suo essere "umano", *vanifica* qualsiasi calcolo previsionale (Danner, O'Boyle, 1999). Infatti, la persona è sempre e comunque un essere libero che viene influenzato da una miriade di fattori contingenti, emotivi, etici e morali che rendono impossibile ipotizzare le fasi del suo processo decisionale in una precisa circostanza e, ancor di più, lungo il corso della sua vita. Di conseguenza, secondo questi autori ciò che è importante non è tanto l'economicità del cammino educativo del soggetto, ancorché non sia da trascurare, ma il compimento della *vocazione* cui il soggetto umano riconosce di essere chiamato nel dipanarsi delle circostanze e dei fatti della sua vita (Papa Pio XI, *Quadragesimo Anno*; Novak, 1966; Papa Giovanni Paolo II, *Laborem Exercens*). Si capisce, pertanto, perché Vito sostenga (1962) lucidamente che accanto alla sempre più accentuata specializzazione professionale occorrono sempre dei *luoghi* educativi (Papa Benedetto XVI, *Caritas in Veritate*) in cui mantenere desta la *domanda antropologica* sul senso della realtà e sul significato della propria vita che inesorabilmente emerge in ogni essere umano. Dalla risposta a questo interrogativo esistenziale – chiamato da Auguste Comte³⁷³ "la domanda delle domande" – dipende, di fatto, la *modalità concreta* con cui ogni uomo affronta il lavoro, gli affetti e il riposo e concorre così al conseguimento del bene comune dell'intera famiglia umana (Tapparelli, 1839). A questo punto l'esperienza del "centuplo" di chi segue Cristo (Mc 10, 29-30) in tutte le vicende quotidiane testimonia

³⁷³ Auguste Comte (1798-1857).

che le implicazioni dei dogmi di fede “*sono come il sole; non si riesce a guardarvi dentro, ma nella sua luce intravediamo tutto il resto*”³⁷⁴ (Chesterton, 1909: 28).

³⁷⁴ Citazione già tradotta in italiano in (Guardini, 1885-1968: 93).

Empirical Appendix

Preface

This empirical appendix is constituted by our personal contribution to developing the research project, “Venice Human Asset Index” (Venice HAI), in which we participated in 2009. The study of Venice HAI was promoted by the Union of Entrepreneurs of Venice and Treviso and the Catholic Patriarchate of Venice while was concretely realized by Enzo Rullani, tenure full professor of knowledge economics at “Venice International University”, Ignazio Musu, tenure full professor of political economy at “Ca’ Foscari” University of Venice, Simone Fluperi and Alessia Bastianello, researchers of labour psychology at Padua University, Fabiano Longoni and the author of this dissertation, respectively associate and assistant professor at “Studium Generale Marcianum” of Venice, and many exponents of enterprises of medium-small dimensions as well as big ones.

In the project of Venice HAI we had analyzed the economic situation of Northeast Italy, particularly the productive provinces of Venice and Treviso, in order to identify the importance of human persons in the value creation dynamic in the new global context (Rullani, 2004a). However, this personal work attempts to develop a Venice HAI set of indexes with special reference to *ethical factors*, which determine the value of human capital.

1. Introduction

In the global economic scenario, the rhythm of change of production systems is much faster than in the past decades. As Joseph Stiglitz pointed out in *Making Globalization Work* (2007), the new economy has provoked the possibility for international enterprises to exploit the remarkable asymmetries among nations concerning cost of labour, level of taxation, and set of legislative norms (e.g., different approaches to human rights and environmental pollution). In this context, the qualitative surplus of

workers' human capital is one of the most relevant sources of competitive advantage of Western Europe and North America (Stewart, 1997; Rullani, 2004b).

As the production system of Northeast Italy has been historically based on a *flexible specialization* characterized by a low rate of knowledge, such as the simple artisan production of gymnastics shoes and hide clothes, investing resources in human capital appears to be an urgent requirement. In fact, the economics literature almost universally recognizes that, in the present knowledge society, the factor that makes a difference in attaining economic success is the endowment of intellectual skills and practical intelligence of human persons and the human community (Rullani, 2008).

In the Venice HAI research, it was brought to our understanding that the *traditional identity* in provinces of Venice and Treviso seems to have been transmitted across generations much more than elsewhere (Aa.Vv., 2009). We substantially refer to the “culture of work and sacrifice” derived from the period of the free Republic of Venice and the moral and ethical values grounded on a conservative and popular Catholic faith (Barni, 2009).

Nonetheless, it is necessary to concretely describe *what benefits* human capital could produce in an economic context characterized by precariousness, flexibility, uncertainty, and globalization. Until the 80s, the enterprises invested money in acquiring new machines; however, they started then to direct their financial efforts toward powering the *technical competence* of their staff (human capital as creation capacity) and developing *collaborative relations* with partners (human capital as reciprocal trust). The former affects a “technical intelligence” because it is related to learning and brainpower, while the latter affects “fluent intelligence” as it is connected to the capacity of sociability and worthiness. However, the urgent empowerment of human capital does not regard only private economic activities. In fact, human persons must *directly* invest resources of time and money for their education and training with the aim of increasing their future wages (Baccini, Vasta, 2001). Political institutions must improve their *cultural services* for stimulating reciprocal trust in society. For these reasons, many

economists have affirmed that this political-economic process of valorisation of human immaterial assets will lead to a “capitalism of networks” (Castells, Cardoso, 2005).

2. Theoretical Analysis of the Venice HAI

It is important to first clarify that the speculated receivers interested in the Venice HAI research results are the main stakeholders of the Northeastern industrial network: syndicates of employees, financial analysts, financial investors, exponents of the social community, authorities of the fiscal system and state, leaders of opinion movements, clients, suppliers, competitors, boards of certification, and internal and external auditing staff. In fact, human capital constitutes an economic reality that *goes beside* the limits of propriety.

Although this consideration is rather obvious in the present globalized economy, we have experienced much difficulty in efficiently communicating this concept to the people of Northeast Italy whom we met. In this geographical area, many people were quite poor immediately after the Second World War but they became rich during the Italian economic boom of the 60s and 70s (Lando, 2009). This change constituted a kind of unbelievable “American dream” for many simple Northeastern people. However, this change even contributed to the diffusion of bad habits related to a *materialistic version* of capitalism, such as excessive consumption of commodities and services, widespread use of corruption for obtaining favors, and a tacit justification of all tools for creating wealth (including drugs to work harder and sexual relations to get ahead in one’s career). In addition, the rejection of investing resources in education and culture increased because Northeastern people usually accumulated more wealth by applying their tacit knowledge in repetitively performing manual labour than by exploiting their intellectual capacities (Gambarotto, 2004).

2.1 Point of Analysis of the Venice HAI

We have previously discussed the perspective of Venice HAI inquiry. Since we wished to set forth interesting arguments for the so-called stakeholders, we had to determine a common point of examination. Therefore, in Venice HAI we distinguished between the *human capital of the entire organization*, i.e., human capital of employees, and *human capital of the entrepreneur*, i.e., human capital of managers and owners. The former concerns the culture of the organization and the modality of making operative procedures; the latter pertains to the capacity of nourishing social relations of reciprocity within the business organization and developing good ideas of innovation. Obviously, the human capital of the entrepreneur has the task of managing the human capital of his collaborators in trying to attain the firm's objectives. Consequently, in Venice HAI we became aware of the necessity of providing to an entrepreneur a *series of indicators* of measurement of human capital of the entire organization, to enable him to better control any situation and be well aware of the performances of every worker and team. In this way, the entrepreneur can integrate and empower the human capabilities of the firm's staff and direct them toward the aims he wishes to reach. He could improve routine activities, introduce new habits, perform internal processes, and select the best external partners. In other words, the entrepreneur can ground his decisions on a set of information related to present and potential capacities of human capital of his business organization.

In fact, a good entrepreneur in Europe or North America would be aware that the competitive advantage of his firm is significantly related to the capacity of *personalizing* the service, responding rapidly to every buyer, implementing new technologies, and modifying the production in conformity to new demand trends (Plechero, Rullani, 2007). In the Venice HAI project, we focused on the principal dimensions of the human capital of workers: *efficiency*, *flexibility*, and *creativity*. These human capacities create economic value without requiring significant financial efforts by the firm (Casanova, De Vita, 2007).

2.2 The Economic Thought Beyond the Venice HAI

In economics, we usually conceive measurement as the process of homogenizing different assets to a standard of comparison. The amount of money is conventionally the measure of stock accumulation. Nevertheless, this modality of analyzing economic investments appears weak in front of the human person's performances. We know that every worker's wage expresses the price of his economic activity, that is, *price of work*, but does not indicate the value of the benefits that his economic activity generates, that is, *value of work*. On the other hand, all the instruments of measurement for governing the market economy have shown their structural weakness, such as the stock exchange quotations, indexes of risk rating, and discount rate. They have created automatisms, which generate an *abstract* and *impersonal* value in an attempt to translate the complexity in *calculable* and *programmable* terms. On the other hand, Fordism and Taylorism had tried to consider the labour, capital, and commodities as products of a repeatable knowledge. These systems of planning production presupposed a *de-personalized* conception of society based on a mechanical rationality whose parameters were the time of work and the value of material capital. In the 70s, the technological introduction of increasing industrialization and the larger openness to foreign markets convinced economists and entrepreneurs that the complexity of society *cannot be compressed* (Colander, 2000).

This change implied the passage from the focus on material assets to that on immaterial assets. The role of human capital everywhere began to be emphasized as pertaining to human capacity of *implementing* technological innovations in processes and promoting qualitative improvements in outputs inside a mutable context of market (Shrader, Siegel, 2007). Next, human capital acquired importance for its ability to favor the realization of useful circumstances for realizing some operations, such as studying psychological and sociological characteristics of potential clients of the firm and communicating to them *personalized messages* of marketing for acclaiming the firms' products (Finne, Grönroos, 2009). Finally, human capital emerged as the *nexus* of creating networks of relations, which led the enterprise to improve its social responsibility (Mio, 2005; Sacconi, 2005).

On the other hand, the investment in human capital affects the immaterial wealth of the firm as well as that of the single worker. The latter could develop the competencies and skills and then use them for increasing his/her placement opportunities in the labour market. The risk that the worker will sell his/her learning capacities to another firm (possibly a competitor) represents an obstacle for the firm's investment. This fact pushes the firms to apply for *outsourcing*; entrepreneurs prefer to seek better qualified human resources in the market instead of training them within their organization. However, external firms that provide outsourcing services are not always capable of catering to the firm's specific needs. Moreover, these external firms can demand high prices if playing in a monopolistic or oligopolistic scenario.

2.3 Methodological Imprinting of the Venice HAI

Human capital investment of any firm could be supported by the state's fiscal aids as well as the European community's social contributions. The entrepreneurial institutions might design a system of proposals aimed to create synergies among firms that are established in the same territorial area. Their thinking may be in the logic of *district* for drawing economies of scale even with respect to the development of immaterial assets. "Capitalism of network" might be accompanied by shared knowledge in an economic district. This should advantage any firm member if the responsible network has foreseen some (explicit/tacit) rules against free rider behaviours (Mistri, Solari, 2003). In fact, the point is a *new culture* of making business. Although maintaining the application of the principle of free competition in a civil context, we must abandon the idea of an isolated and self-sufficient enterprise of the past in exchange for embracing an idea of business activity *in teams* vivified by the spirit of cooperation and reciprocity. This idea can bring about the necessary change.

It deals with a possible change. In fact, for example, in the past, in Northeast Italy, there existed the practice of keeping the firm's budget confidential; however, today, the presentation of a firm's financial performance is almost always public in keeping with the Anglo-Saxon tradition. This change promoted a *new business communication* capable of satisfying the needs of not only shareholders but also stakeholders. Indeed, we are living in the post-modern age where ICT (information-communication-

technology) affects every aspect of human life, sometimes neglecting privacy. The frequent use of social and information networks, such as Facebook and Twitter, by many people influences even the contents and modalities of people's consumption (Castells, 2009).

Consequently, in the Venice HAI, we distinguished from the macroeconomic retrospective and prospective methods as well as from the microeconomic setting based on the criterion of rational choice. We preferred to develop an inductive method of human capital analysis from the firm's viewpoint (Teece, Pisano, 1994). Within any business organization, we identified an *intellectual capital*, divided into *structural capital* and *human capital* (Antonietti, 2007). The former indicates the knowledge embodied inside ICT and computer based-machines, while the latter refers to the business culture of the firm's organization, the skills and practical knowledge of employees and outsourced workers, and the entrepreneur's coordinating capacity for solving problems and achieving objectives among the staff. The point of our examination thus has been to determine the value of human capital in relation to the firm's capacity of generating industrial profits. Although we have agreed with the perplexity of David Hume³⁷⁵ and Karl Popper³⁷⁶ regarding the reliability of the inductive method, we attempted to construct a *synthetic set* of indexes (efficiency, flexibility, creativity) capable of giving value to the firm's human capital. Next, we applied this set of indexes in some sample firms and verified the possible combinations between them. Obviously, we chose these *sample firms* according to the statistical criteria of selection, for obtaining a good instrument of analysis of correlations between the human capital quality and the firm's functioning (Ricolfi, 1997). The sample firms are all localized in Northeast Italy, particularly in the provinces of Venice and Treviso. They are: Gruppo SAE Srl, Umana Spa, AIVE Spa, Turatti Srl, Rossi Moda Spa, Calzaturificio Ballin Srl, Thetis Spa, Venice Home Collection Srl, Tessuti Bevilacqua Srl, Calzaturificio Gritti Srl, Incotex Spa, Gasparini Spa, Velo Spa, Goppion Caffè Spa, Inglass Srl, Grafiche Antiga Spa, Pasta Zara Spa.

³⁷⁵David Hume (1711–1776)

³⁷⁶Karl Popper (1902–1994)

3. Empirical Analysis of the Venice HAI

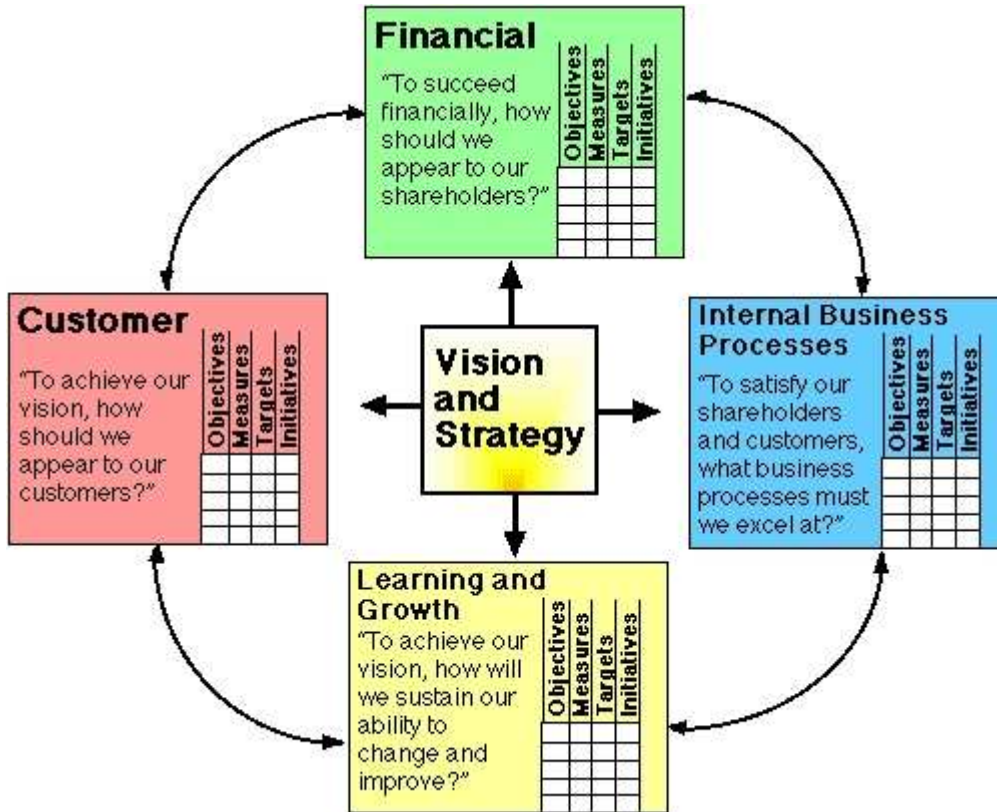
The economics literature in the 60s saw the emergence of “Human Resources Accounting.” Scholars started conceptualizing human capital models by focusing on simulations related to the impact of human resources on a firm’s strategies and performances (Giuliani, 2006). This fact constituted a significant novelty because after the 60s, human capital became a topic of not only political economy but also *business administration* (Fitz-Enz, 2000).

3.1 Precedent Models of the Venice HAI

In the economics literature, as examined in the central part of our dissertation, the attempts of measuring human capital were directed to estimate the *value* of human capital stock. On the contrary, in business literature, the models were directed to determine the *workers’ contribution* to the attainment of a firm’s objectives. In this appendix, we are interested in the latter type because we conducted an empirical analysis on the correlation between workers’ human capital and firms’ performances. The following are the most famous models of measuring human capital in business literature.

i) *Balanced Scorecard*: This is a system of indicators of internal auditing regarding every area of management, elaborated by Robert Kaplan and Daniel Norton (1996). They argued that in order to seriously consider the principle of *unity of a firm’s management* in the analysis of value creation, it is necessary to provide a *linkage* between indicators of internal auditing of different areas. In this way, business activity can be examined in a global perspective. Therefore, Kaplan and Norton (2000) explained that any aspect of economic management might be judged by using a score indicating the degree of satisfaction of the realized performances. In their opinion, human capital particularly affects the area of “Learning and Growth” and is related to capacities, competencies, motivations, sense of responsibility, and engagement of human persons involved in a business activity.

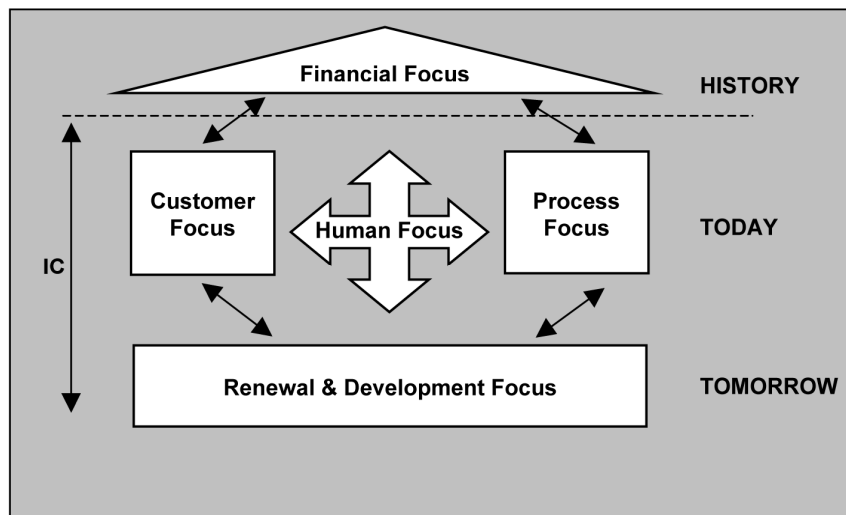
Figure n° 3: Kaplan's and Norton's (2000) Balanced Scorecard Model



ii) *Skandia Navigator*: Leif Edvinsson developed along with Michael Malone (1997) his previous model (1994) elaborated in collaboration with "Skandia," a Swedish insurance corporation. The Skandia Navigator was conceptualized as a model integrating the document of budget with regard to *intangible capital* (IC). IC is analyzed through the use of a series of indicators and with a combination of some of these indicators, within a perspective that attempts to consider the temporal horizon of the past as well as the future. The Skandia Navigator distinguishes between a thinking intangible capital (human focus) and a non-thinking intangible capital (immaterial but non-human capital) for enabling the firm's directors to orient the management according to the strategic ways of development. The former is substantially constituted by the staff's human capital because it includes relations among colleagues, ethic

values, and working competences, while the latter refers to the quality of relations with clients (customer focus) and level of innovation of processes (process focus). Both types of intangible capital are stimulated to improve themselves continuously (renewal and development focus) for increasing the firm's performances.

Figure n° 4: Edvinsson's and Malone's (1997) Skandia Navigator Model



iii) *Intangible Asset Monitor*. Karl-Erik Sveiby (1997) proposed an original model in which human persons are considered the *only creators* of economic value. In fact, Sveiby argued that the other material or immaterial assets derive from the accumulation of human competences and combination of human actions within the internal and external structure. Human capital thus is the focus of Sveiby's thought.

Table n° 1: Sveiby’s (1997) Intangible Asset Monitor Model

Competence	Internal structure	External structure
Indicators of growth/renewal Years in profession Education level Training costs Turnover	Indicators of growth/renewal Investments in systems, etc. Customers contributing to systems/process building	Indicators of growth/renewal Profitability per customer Organic growth
Indicators of efficiency Leverage effect Value-added per professional	Indicators of efficiency Proportion of support staff Sales per support person Corporate culture poll	Indicators of efficiency Satisfied customers index Win/loss index Sales per customer
Indicators of stability Average age Seniority Professional turnover rate	Indicators of stability Age of organization Support staff turnover rate Rookie ratio	Indicators of stability Proportion of big customers Age structure Devoted customers ratio Frequency of repeat orders

3.2 The Venice HAI Model

The above mentioned models of human capital are very interesting from the viewpoint of management of big enterprises (public companies); however, they are not suitable for representing small and medium firms (familiar companies), such as those that characterize the context of Northeast Italy (Corò, Schenkel, Volpe, 2007). Moreover, the Balanced Scorecard, Skandia Navigator, and Intangible Asset Monitor do not sufficiently identify the *ethical elements* of workers’ human capital. As a consequence, they undervalue the impact of emotional experiences, moral values, and religious beliefs in the directors’ decisions and in the employees’ productivity (Velasquez, 2005).

Therefore, we decided to construct a new synthetic set of indexes. We distributed a *biometrical schedule* to the firms involved in our project wherein we requested for the general features of every component of the employees. To execute this, we required a division of workers according to certain social and personal criteria (age, gender, education, health, family, etc.) and organizational criteria (mobility, framing, attitude, etc.). Second, we asked the leaders of the firms involved to give us some time for an interview. In this dialogue, we intended to collect *informal data* about the practical role of human capital within their firms, in order to acquire a global vision of every enterprise and draw some original insight for our analysis. We deliberately designed a *quasi-structured interview* where we outlined arguments and proposed open questions

but in a flexible manner; we encouraged open-ended responses for interviewees to emphasize the strengths and weaknesses of his staff in the attainment of his firm's objectives. The interview, conducted at the firm's principal location, was videotaped and lasted for about an hour.

3.3 Content of Quasi-Structured Interview Used in the Venice HAI

I - Competitive Advantage

- Please explain briefly the historical evolution of your business?
- What have been the elements responsible for the success of your business?
- How much success is attributable to workers?
- What innovative factors have mainly contributed to the attainment of the present market position?
- Could you hypothetically try to divide the elements of success into the three kinds of intelligence of human capital: efficiency, flexibility, and creativity?

The responses to the three last questions are inserted into the sub-dimensional area "Change" in the section "Elements of Human Capital."

II - Elements of Human Capital

We have developed a biometric collection of data on the growth of human capital. These data have been codified into four sub-dimensional areas.

II.1 - Development

- What type of competences do your workers possess? Are they equipped with educational or training competences?

- In what way do you respond to the lack of competences? Do you require the collaboration of external staff? Do you engage other employees?
- When do you usually decide to increase the staff? What are the decisive factors for engaging new staff, for example, an increase in demand or reception of a large order?
- How have you selected the new staff? What kind of intelligence (efficiency, flexibility, creativity) have you focused on?
- How and why have you decided to employ new staff from a strategic point of view?
- Have you recognized the presence of a different type of intelligence in the new staff you have engaged?
- If the response to the previous question is affirmative, do you manage these types of different intelligence by personalizing the manner of their exploitation?
- Do you predict certain career plans for your employees?
- Do you consider training to be a good instrument for developing the human capital?
- How do you implement training? Do you employ abstract lessons, practical teachings, and informal attempts of innovation on the job?
- Does the growth of a person's human capital determine his/her career within your firm?
- Do you only promote the development of your human capital or do you propose a policy of incentive for human capital self-improvement by the staff?
- To what extent do you think has the quality of your human capital influenced the success, development, and growth of your business?

II.2 - Management

- How do you stimulate the staff's motivation?
- How do you manage their competences?

- What techniques do you use for the management of your employees?
- What reward systems have you implemented for awarding the staff on their merit?
- Are these instruments used for all staff members or only some of them?
- Have you encountered any difficulties in the application of these instruments?
- If the response to the previous question is affirmative, how have you managed to overcome these difficulties?
- How have you prevented your staff from moving to another competitor firm?

II.3 - Change

- What type of critique situations are you experiencing at present?
- What are the strategies that you employ for dealing with these critique situations?
- What, according to you, are the elements that will be decisive in the next 3–5 years?
- Who are your competitors and what future strategies are they employing?
- What distinguishes your firm from your competitors in relation to the three types of intelligence (efficiency, flexibility, creativity)?
- What changes have you realized in staff management in the last five years?
- What actions will you promote for staff management in the next five years?
- What type of persons will you choose for responding to the challenge of global competition that you will be faced with?
- Are these people part of your firm's staff or will you consider outsourcing them?

II.4 - Control

- Is there a system for reporting feedback or complaints about the management in your firm?
- If the response to the previous question is positive, can you describe this system?
- Do you use it in integration with the performance of human resources?

III - Relation with the Social Community and Ecological Environment

- What relationship does your enterprise have with the social community and ecological environment?
- What has been the significance of social community and ecological environment in the development of your business?
- What kinds of difficulties with the social community and ecological environment have you experienced in the past?
- What kinds of difficulties with the social community and the ecological environment are you experiencing now?
- What type of relationship exists among your enterprise, the social community, and the ecological environment?

3.4 Codification of Qualitative Data of the Venice HAI

At this point, we have recorded the responses of leaders of firms involved and transformed the simple data into information. This process required a synthesis of contents of interviews for stating the principal ideas and more meaningful concepts. Second, we carried out a *re-elaboration* of codified data according to Ian Dey's (1993) procedure of analysis of qualitative data and with the help of three external technical referees (statisticians) who were independent from the purpose of our research. In this way, the data are objectively codified and transformed into *information*. Information is selected in categories of frequency. Finally, we identified the relations between the information and pointed out the more interesting and original insights (Glaser, Strauss, 1967).

Hence, we managed to obtain the *elements of success* in the area of human capital with respect to the aspects of business development, management, change, and control. The leaders of the involved firms confirmed our theoretical intuition that the more remarkable variables of human capital are efficiency, flexibility, and creativity, although they attributed a different level of importance to them. Obviously, the information has not been always perfectly comprehensible because the data of responses in the interviews were occasionally simple and concise. However, from this statistical inquiry, it has been inferred that human capital is a fundamental factor for effective performance in the firms of Northeast Italy.

In fact, it is interesting to note that de-localization, competition, and model of organization affect and are simultaneously affected by human capital dynamics. Indeed, the successful firms declared that their strategies are grounded on the formation and specialization of their managers and employees. However, the Venice HAI highlights that ethics of the persons involved in the process of value creation is a fundamental *transversal* factor.

3.5 Cluster Analysis of the Venice HAI

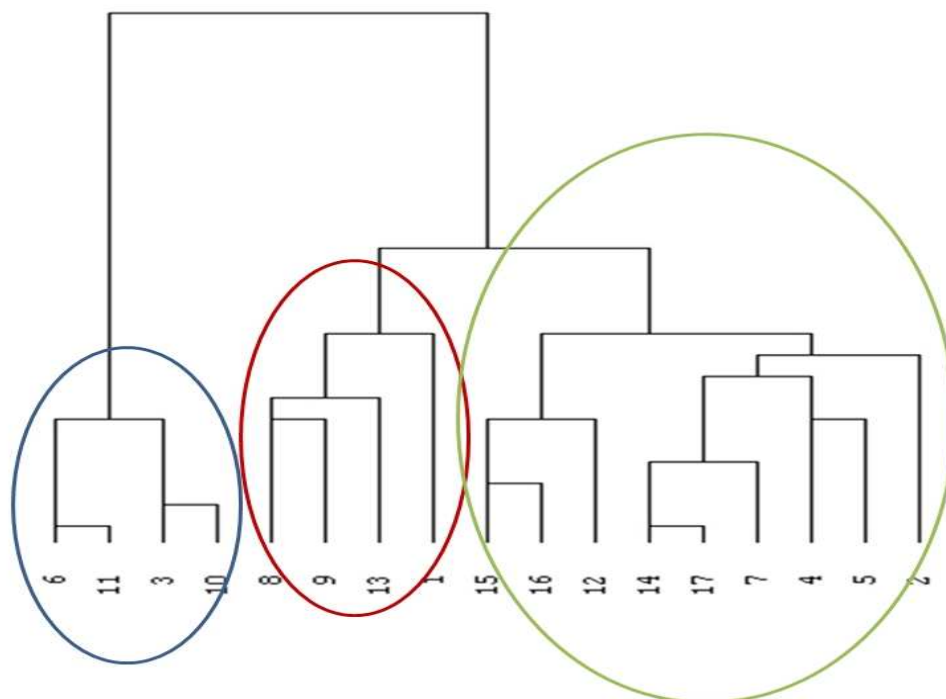
As we have just explained, the transformation of qualitative data into information guided us to determine some *categories* of frequency. Our successive cluster analysis was constituted by the application of a series of techniques aimed at identifying groups of similar statistical unities in relation to a specific criterion and a whole set of reference characters (Romesburg, 2004). In this way, we could substantially gather heterogeneous statistical unities in subgroups that are fundamentally *homogeneous*. Thus, we divided the statistical unities into groups based on their degree of “similarity” to the content of every category of frequency that we have determined so far. The cluster analysis seemed to suit us better than other multivariate statistical methods because it does not presuppose any “a priori” assumption. In fact, the cluster analysis is an inductive technique for exploring latent variables.

Next, we adopted the hierarchical method of Roger Ward for *ordering* the groups. This procedure foresees that the researcher calculates the deviations associated to all

possible groups and, at every step of the statistical analysis, aggregates those groups whose internal deviations are similar in relation to a defined category of frequency. In this way, we managed to reduce the attributes identified by the categorization process from 106 to 71 by eliminating all the attributes present only one time.

Finally, we unified the groups characterized by similar qualities and placed the information in a statistical software. We achieved the following *dendogram* where, in the axis of abscissas, we indicated a reference number for every firm that participated in our research. We indicated the distance in the axis of ordinates. The height at which the two branches meet represents the distance between them; thus, we can affirm that our cluster analysis indicates a strong *hierarchical structure* constituted by three clusters. The first cluster is highlighted with the color blue and includes the firm numbers 6, 11, 3, and 10. The second cluster is highlighted with red, composed by the firm numbers 8, 9, 13, 1, and has some common parts with the third cluster, which is highlighted with the color green and is formed by the firm numbers 15, 16, 12, 14, 17, 7, 4, 5, and 2.

Figure n° 5: Graphic Representation of Cluster Analysis Results



Finally, we have elaborated the following contingent tables by using the cluster analysis according to the Euclidean mean square distance method and Ronald Fisher's exact test.

Table n° 2: Dataset of Cluster Analysis

Categories:	Cluster 1 (N = 4)	Cluster 2 (N = 4)	Cluster 3 (N = 9)	Exact Test of Ronald Fisher
Ethic Tradition	0,00%	50,00%	0,00%	*0,088
Creativity	0,00%	50,00%	0,00%	*0,088
De-localization	50,00%	0,00%	0,00%	*0,088
Being Northeastern	50,00%	75,00%	0,00%	**0,012
Flexibility	50,00%	50,00%	100,00%	*0,060
Education	75,00%	0,00%	11,10%	*0,060
No-programmed Development	100,00%	25,00%	11,10%	**0,014
Development with Learning	0,00%	50,00%	88,90%	**0,008
Technical Training	100,00%	50,00%	100,00%	*0,088
Psycho-Sociological Training	0,00%	25,00%	66,70%	*0,073
Interpersonal	100,00%	0,00%	22,20%	**0,014

Relation				
Marketing	0,00%	50,00%	0,00%	*0,088
Internationalization	100,00%	0,00%	11,10%	**0,004
Delocalization	50,00%	0,00%	0,00%	*0,088
Institution	0,00%	100,00%	11,10%	**0,004
Efficiency	0,00%	25,00%	77,80%	**0,026
No-codified Factors	75,00%	50,00%	0,00%	**0,012
* p < 0,1; **p < 0,05				

The results indicate that the principal factors of success of workers' human capital suggested by interviewed managers are

- i) *creativity*,
- ii) *traditional identity*,
- iii) capacity of promoting *processes of de-localization*, and
- iv) the fact of *being Northeastern*.

If we more precisely look at the results, we find that the firms belonging to the first cluster have affirmed the importance of modalities of introduction of workers' human capital in the production process, realization of informal reports of administration control, and promotion of operations of internationalization. The firms of the first cluster praised the quality of interpersonal relations among their workers and their technical training. Firms belonging to the second cluster have mainly sustained the factor of relation with the territory, the social community, and the ecological environment. Last, firms in the third cluster particularly pointed out the relevance of workers' flexibility, their capacity of making codified reports of efficiency, and their technical growth through specific training.

4. Our Development of the Venice HAI within a Personalist Perspective

We attempted to methodologically base the Venice HAI research in a personalist economic pattern to explore the consequences. The Venice HAI findings revealed that creativity and cultural identity of workers are the elements of success of firms' performance (McPhail, 2008). These two ethical factors can be better identified if we analyze a person's actions. In fact, Pope John Paul II taught us that every action is inspired by a person's ethics and a person's ethics is derived from his/her anthropology. Indeed, in *Etica e Decisione* (2007), the monsignor Fabiano Longoni confirmed this by writing:

Our meaning of ethics wants to be that of re-discovering the original content of daily living ... Ethics is thus to catch in any person's action what fulfils her fullness of satisfaction. (2007: 147)

In this way, Longoni clarified that ethics does not coincide with obedience to law or with adherence to a religious truth. Instead, ethics refers to a person's anthropology, which determines his/her *motivations, habits, and behaviours*. In other words, the personalist view sustains that ethics is constituted by the application of the series of metaphysical values interiorized by the person's long life, to real problems (Sacconi, 1991). Therefore, ethics is influenced by sentimental, psychological, sociological, and moral factors that have characterized the person's history, particularly those that are influencing the person when he/she is taking decisions (Bano, 2006). We thus reject the closed analysis of mainstream economics, where ethics is an exogenous determinant of human capital dynamic. However, we promote a vision of ethics as an *endogenous factor* of the process of a person's action³⁷⁷ (Signori, Rusconi, 2009). In fact, in *any*

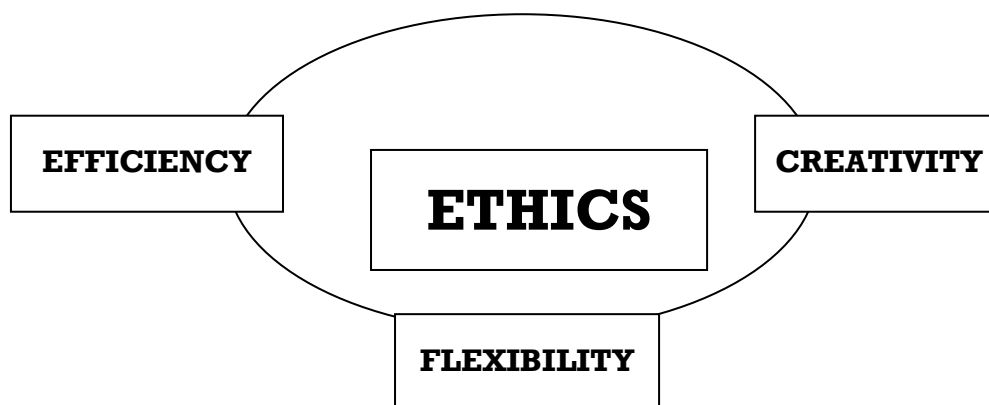
³⁷⁷ For example, an entrepreneur who reacts badly to the notice of pregnancy of his employee implicitly shows his lack of recognition for the infinitive value of the unborn child and his deep attachment to his

human act, the person experiences his/her nature, which is composed of spirit and body, need and will, selfishness and altruism, rationality and emotionality (Melè, 2009a). This personalist method of analysis of human decisions appears surprising *realist* (Melè, 2009b), because any human act constitutes an *objective fact* from which we can identify the person's anthropology. Indeed, everyone expresses himself through his actions. For example, one who does free-rider behaviours proves to be a dishonest person.

4.1 Proposals of Ethical Parameters of Human Capital

In our development of the Venice HAI research, we identified the ethical factors of human capital for improving people's performances. We know that ethics is a *transversal* element that affects all three types of human intelligence (efficiency, flexibility, creativity) and simultaneously maintains an *autonomous sphere*.

Figure n° 6: Ethics and Human Capital



firm's profit for which he must reorganize the productive sequence (besides his duty of paying a monthly maternity allowance).

Therefore, we could hypothesize a scoring for every ethical variable with the understanding that this operation is useful only in *symbolic* terms. Although we can try to quantify the score of some ethical determinants, we have to acknowledge the *un-reducible character* of a person to her antecedent factors. In fact, we will never indicate in quantitative terms the *ethical qualitative dimension* of human capital, such as the criteria of distinction between what is good and what is wrong. Therefore, we have pointed out the following ethical factors.

• *Person's love for his/her work, exhibited as the following:*

- (a) commitment and diligence
- (b) specific working vocation
- (c) willingness to put in more working hours and more transfers
- (d) full personal participation wherever necessary

• *Person's responsibility of intentions and actions toward the following:*

- (a) him/herself
- (b) his/her bosses, colleagues, and subordinates
- (c) the social community in which the business is established
- (d) the ecological environment in which the business operates

• *Person's capacity of judging concrete facts concerning business including the following:*

- (a) timeliness of analysis and industriousness of response
- (b) delegation or assumption of risks according to the cases
- (c) valuation of every single element of business activity in a global perspective

• *Person's relational capacity including the following:*

- (a) interaction and cooperation with others
- (b) appreciation and valorisation of others' competences, ambitions, and capacities

- (c) sociability and solidarity
- (d) reliability and trust within the staff of the business organization and outside

• *Person's capacity of decision making in the following areas:*

- (a) determination when faced with risks, difficulties, and other workers' problems
- (b) conviction of attainment of business objectives via morally acceptable means
- (c) deep sense of sacrifice and, based on the cases, firmness, perseverance, careful consideration, prudence, strength, and tenacity
- (d) creativity in problem solving and openness to innovation of processes and products
- (e) capacity of defining a hierarchal order of choices

• *Person's motivation in the following aspects:*

- (a) advancement of career, increase of wages, and development of technical capacities
- (b) reputation and gratification
- (c) moral conscience whereby he/she connects every particular aspect of work with the total meaning of living
- (d) identification of the metaphysical ideals and religious truths which must inspire actions

• *Person's residual elements that examine the following:*

- (a) independency in taking decisions
- (b) security of health and job
- (c) variety of work tasks and amount of leisure
- (d) stability of affective relations and material and immaterial well-being of family
- (e) determinability of personal contribution to business activity
- (f) social utility of work and defense in case of health problems

(g) firm's atmosphere including production prize, Christmas gifts, coffee breaks, etc.

4.2 Human Capital as a Latent Variable depending from Ethics

Although the Venice HAI has been a good attempt at ranking the characteristics of human capital, we must affirm the *impossibility* of considering the investment in human capital, as any other type of material investment causes a *paradox* in the economic theory (Bowman, Swart, 2006). The awareness of the positive contribution of human capital to any business certainly cannot be expressed in quantitative terms. How can an enterprise calculate incomes, wages, and cash flows related to a human discovery or a human innovation? We know that human discovery and innovations can succeed or fail, and this implies that the passage from the centrality of material assets to that of immaterial ones corresponds to the passage from the traditional method of business analysis based on rates of the returns of material investments to a more hypothetical esteem of the returns of intangible assets. This transition becomes even more complex if we consider that the level of *uncertainty* is continuously multiplied by the interactions that take place among uncertain enterprises.

However, the Italian economic system generally seems to benefit from the introduction of innovations and discoveries, especially in big and medium enterprises. In Northeast Italy, economic activities of small firms exhibit a less positive attitude to investment in human capital, and thus their advantages are minor (Marini, Oliva, 2009). These small enterprises are usually managed directly by the owner who is also the founder. He has almost always developed his business activity by involving his relatives, selling to private consumers without bills to avoid paying taxes, and making progress through an increase in exportation. In fact, the Italian state's de-valorization of "Lira" (the past national currency) in contrast to the other currencies (especially German Mark) was used as an instrument of economic policy for sustaining the export sales (Bruni S., 2005). This type of entrepreneur is often incapable of understanding that the world has changed and that the organization of his enterprise *must change*.

In conclusion, we wish to propose a hypothesis. In the Venice HAI research as well as in the precedent methods of estimating human capital, the ethical factor was never considered a direct input. However, in our methodological development of the Venice HAI, we argue that ethics is the *substratum* of all other human capital factors. As a consequence, we suggest describing human capital as a *latent variable* because the equation of human capital cannot be expressed as a function of manifest variables (Bentler, 1992). On this basis, Camillo Dagum and Daniel Slottje (2000) argued that household human capital at a microeconomic level is the multidimensional, non-observable construct generated by cultural tradition, family background, social context, innate and non-cognitive abilities and skills whose effects are indirectly and only partly measurable by the present value of an individual's income flow. In our opinion, this interesting approach needs to be integrated by means of *reflexive* indicators capable of expressing a person's anthropology (Dagum et al., 2007; Lovaglio, 2008).

5. Conclusions

We believe that it is important for economists to not measure human capital but instead to promote its growth everywhere, particularly in the underdeveloped countries. In fact, Hernand de Soto, in *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else?* (2000), demonstrated that the problem of the Third World is not constituted by the lack of resources but by the incapacity of constructing a *legislative pattern* of economy and of exploiting the wealth of human capital. de Soto proved that the poor in these countries have material assets valued at 9 trillion dollars, which is higher than all the aids these countries received from 1945 to date. In the case of Egypt, de Soto calculated that the assets of the poor are 55 times higher than all foreign investments received by Egypt since 1945, including those for the Suez Canal and the Aswan Dam. When faced with the question "why the human capabilities of the poor do not become capital," de Soto responded that the poor are *outside* the sphere of the law. Ninety-five percent of their houses are illegal; they do not even exist. They exist only to protect them physically, to let them sleep. However, they cannot sell their

houses if they wish to, because they are illegal, and the poor in Egypt are prohibited from building a house legally. Finally, de Soto compared the average time required for receiving a license as taxi driver in Egypt and the United States, which was 26 months and 15 days, respectively.

Therefore, we can understand that the Aristotelian-Thomist primacy of *politics* over economics, of *morality* over politics, and of *anthropology* over morality is indispensable in the present time, for attaining the *common good* of all persons in the world. Hence, we believe that this dissertation's discovery is that an improvement in the human integral development of all people in the world is not grounded on financial aid donations by the rich –although they are important as well– but the diffusion of the *culture* of the un-reducible character of human dignity and the un-estimable value of human life from the person's conception till natural death. We thus completely agree with the affirmation of the cardinal Avery Dulles S.J.³⁷⁸: “*Wealth consists more in what we are than in what we have*” (2007: 421). As a consequence, we believe that human capital can fully and integrally flourish provided the concept of *human person* prevails on the concept of individual in economics studies and affairs.

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³⁷⁸ Avery Dulles SJ (1918–2008)

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