1. Introduction

In modern business practice, capital is distinguished into two . . . categories of assets, tangible and intangible.

Thorstein Veblen 1919: 352–3

In the early days at least, this [intangible assets] is far and away the most important and consequential category of the community’s assets

ibid, 325–6

INTRODUCTION

Unfortunately, the economics profession has not done very much to develop the early insights of Thorstein Veblen. True, practically all economists (and other social scientists) accept the view that investment in things like education and training creates a human type of capital which yields returns to the people in whom it is embodied. But when it comes to the noncognitive or more intangible forms of human capital, economists generally do not accept that these intangible forms of capital are relevant to their research.

The great recent interest of noneconomist social scientists in intangible capital, particularly social capital (SC), has, however, caused more than a few economists to pay attention. Nevertheless most mainstream economists who have bothered to consider SC remain skeptical of its importance. For example, while admitting the ‘plausibility that social networks can affect economic performance,’ Kenneth Arrow (2000: 3) doubts that the SC concept can be made ‘operational for the purposes of analysis and policy.’ Similarly, Robert Solow (2000: 6) thinks that SC writers ‘are trying to get at something difficult, complicated, and important,’ but he also believes they are trying ‘to gain conviction from a bad analogy.’ On the other hand, Joseph Stiglitz (2000: 59), while admitting that ‘SC is a concept with a short and already confused history,’ believes that ‘SC is a very useful concept but an extremely complex one, in which different perspectives have much to contribute’ (p. 67).

As has been widely noted, for SC (just one, albeit important, component of intangible capital (IC)), there are many different definitions and disciplinary perspectives. This proliferation of different types of capital in social science literatures has been interesting, at times exciting, but often
frustrating and confusing. There is an obvious need for sorting through all these capital categories to determine what is valid, useful, and true to the meaning of capital as productive capacity. In clarifying the nature of IC and its component types of capital, this book seeks to understand IC as long lasting human capacity that is at once consistent with the core concept of capital in economics, but at variance with the narrow interpretation of capital generally taken by mainstream economists. On the other hand, some noneconomists may find the concept of IC used here too narrow or too economic for their purposes. This is understandable. Nevertheless, a prime purpose of this book is to indicate the importance of IC by demonstrating how utilizing the IC concept can provide new understanding of a range of problems and issues that have at least a partially economic nature. In its emphasis on the economic or socio-economic aspect of IC, this book arguably ignores some interesting and fruitful noneconomic applications. This is not to say that these are unimportant or incorrect; they are just not the focus of this book.

As later chapters will spell out in detail, IC refers to the many things that are in humans or in their relationships, things that enable people to perform well in their work situations, and thus be productive and successful. It also refers to things that enable people to be rational and experience well-being. IC certainly includes things like standard education and training which provide knowledge and know-how, generally things with a high cognitive component. This is the well recognized and widely accepted part of IC. Another part relates to the noncognitive qualities of people. Some people perform better at work because they are more motivated, more persistent, more empathetic, manage their emotions better, manage their social relationships better, are more patient, more focused on goals, are more tough mindedly competitive, and so on. Some groups of workers produce more because they have developed relationships with each other that channel their energies and communications in positive, constructive ways. Workers’ social networks and the organizational structures that control them insure that communications occur easily and are well directed. The quality of these relationships may contribute to cooperative, coordinated efforts that lower the cost of getting things accomplished. In sum, when workers are equipped with the requisite knowledge and training, when they have developed the necessary personal qualities, and when they have developed appropriate organizational relationships, assuming they have been inspired and focused by strong leaders, these workers have the capacity for superior performance. In the absence of these IC qualities, these workers’ productive capacity and performance are likely to be severely limited. An important purpose of this book is to provide a framework for thinking about the whole range of these long
lasting human qualities, and thereby to enable clear economic thinking about these phenomena.

The IC topic is part of behavioral economics; it is a part, thus far, relatively lacking in appreciation. Hopefully, by bringing our analytical tools and interdisciplinary perspectives to bear on IC, it will be possible to bring the human factor related to productivity more fully into economic analysis than has heretofore been the case. Also, greater understanding of the intangible human factor should add to our appreciation of what determines human well-being and what contributes to truly rational human behavior.

There are many good reasons to be skeptical about the value of the IC concept. First, most of us have a clear understanding of how machines can raise productivity, either by saving labor or by enabling production that humans could not otherwise do. It is much less clear how human qualities and relationships can contribute to productivity. Thus, one of the purposes of this book is to indicate how the IC components enable greater productivity and can be either a substitute for or complement to tangible capital. Another reason to be skeptical about IC is that by its very nature it is difficult to observe and measure. Relatedly, it is difficult to incorporate into economic theory, which often finds mathematical expression. If it cannot be quantified and put into an equation, does it exist? Economists who adopt a strongly positivistic orientation may answer no.

Further, there are other traditions in economics that reinforce the neglect of the intangible human factor. Traditionally, productive wealth is thought of as tangible, something that is owned and traded. The owners of productive wealth are known as capitalists who buy the services of labor. Most people think in terms of production by means of capital and labor, two distinct and opposed entities. When the capital term is extended to the intangible human aspects, it inevitably blurs these traditional associations. But that’s not necessarily a bad thing. The breakdown of these traditional patterns and distinctions is one reason why it would be good to recognize and utilize the IC concept. Juxtaposing capital and labor, even investment and consumption, as has been done in the past, is becoming ever more counterproductive to understanding the economic world of today.

It is interesting to note that there is evidence that intangible human factors of all kinds are becoming relatively more important contributors to output compared to tangible factors. Notably, intangible factors seem to be increasingly important in advanced industrial economies. At the same time, there is also reason to believe that IC is critical to less developed countries’ efforts to achieve sustained economic development. Lack of critical intangible human competencies, not lack of tangible resources, arguably is the
biggest roadblock to these countries’ efforts to close the gap between themselves and their more developed brethren.

**PLAN OF THE BOOK**

Chapter 2 is devoted to carefully defining IC and its component capital types. The purpose of this chapter is to develop a comprehensive and unifying conception of IC. This chapter indicates how the IC definition is consistent with and integrated with definitions of tangible capital, human capital and social capital among others. Particularly important here are a number of the more intangible components of IC such as noncognitive human capital, personal capital, moral capital, and cultural capital.

Chapter 3 deals with the contribution that IC makes to economic growth. The first half explains how investment in the major components of IC (human capital in individuals, social capital and organizational capital) contributes to productivity growth and makes possible economic growth. The second half of the chapter reviews pertinent empirical findings on IC’s contribution to economic growth. The main findings of nine studies of the effect of SC on economic growth and performance are summarized. In essence these researchers find that SC variables have a highly significant (economically and statistically) effect on economic growth and performance, which is independent of and strong relative to the effect of the standard human capital variables. Also findings relevant to the contribution of noncognitive human capital to economic growth are reviewed. The findings indicate that noncognitive skills/traits are an important and neglected determinant of earnings.

Chapter 4 concerns organizational capital’s contribution to the economic performance of the innovative businesses that invest in it. More specifically, the chapter explains how businesses which adopt high performance work systems, involving clusters of innovative human resource practices, are able to achieve superior economic performance. In doing this, the chapter draws on two largely separate literatures, the human resource management literature and economic theory, notably X-efficiency theory. A key part of the explanation relates to the advantages that an involvement-oriented organization has over a control-oriented organization.

Chapter 5 is an empirical study by Bart Eikelenboom of Nyenrode University in the Netherlands. Eikelenboom’s study is unique and notable in that it utilizes data relating to the organizational capital or capabilities of business units in Netherlands-based multinational corporations and their economic performance. He finds a significant, positive relationship between their organizational capital and their economic performance. This
finding constitutes important support for the notion that investment in intangible capital is important for the performance of business organizations, and thus presumably for a nation’s economic growth.

Chapter 6 concerns personal capital, a noncognitive type of human capital. It carefully defines and explains the nature of personal capital, especially its most important component, emotional intelligence. The chapter utilizes Daniel Goleman’s conception of emotional intelligence and explains why a variety of human emotional competencies are crucially important for individual and company success. Based on the chapter’s arguments, evidence from Goleman’s studies, and other findings provided in Chapter 3, there is strong support for the view that investment in personal capital provides an explanation for the part of economic growth unexplained by the growth in the more tangible factors. In other words, personal capital is an important source of the economy’s performance, quite separate from the influence of standard, cognitive-types of human capital.

Chapter 7 involves an application of the intangible capital concept to understanding the problematic aspects of the late-twentieth-century Eastern European transition from socialism to capitalism. The essence of the transition has generally been conceived of as the substitution of the organizational structures and the legal, financial and political relationships of capitalism for those of socialism, that is, a substitution of capitalism’s hard features for socialism’s. But this conception of socio-economic systems leaves out the important soft aspects such as social capital and personal capital. These important soft factors such as attitudes, behavioral orientations, values and beliefs must mesh with the hard elements of a socio-economic system, otherwise the system’s performance will be impaired. Unfortunately, the transition processes in most of these countries followed the neo-liberal radical reform strategy in which the hard features were changed very quickly without attention to the soft features. The result tended to be a severe shock which greatly retarded the transition process. If the architects of change had been informed by a transition model that included the soft, intangible capital factors, it is likely that the transitions would have been less problematic and would have achieved greater economic success. The socio-economic model developed in this chapter, first explains the differing degrees of transition success among Eastern Europe nations and second, suggests alternatives to neo-liberal transition strategy.

Human well-being is ultimately about living a good life. Chapter 8 concerns the key elements in a person’s life that determine how well off he or she is. Contrary to the welfarist approach’s emphasis on material factors, the analysis of this chapter indicates why certain intangible factors in a person’s life are essential to well-being. The welfarist approach does well in accounting for the tangible means to a good life, but it misses much that is
important. Even Sen’s valuable functionings approach that considers people’s intrinsically important doings and beings does not capture all of the higher, broader aspect of life. The approach developed in this chapter modifies Sen’s functionings approach and considers a person’s higher human functionings as well as his or her ordinary, lower functionings. At the heart of this approach is the idea that raising a society’s level of well-being requires a variety of kinds of intangible capital formation, particularly investment in personal capital and social capital.

Chapter 9 develops a socio-economic model of addictive behavior that explains why, contrary to the mainstream economic model of Gary Becker and others, addiction is not an example of rational economic behavior. Addiction is a harmful habit that involves dependence (often on a commodity), compulsive consumption and craving, and usually severe withdrawal symptoms. The model is designed to explain the behavior of addicts or would-be addicts and understand why their decision making is often not rational in the sense of weighing expected benefits and costs in a careful, unbiased way. According to the model, addictions develop in people who have ‘significant imbalances’ and who encounter situations where addictive goods are available, affordable, and attractive. The five external and internal influences that explain an individual’s degree of imbalance and the factors that modify the strength of the imbalance are:

1. the individual’s personal capital;
2. the individual’s social capital;
3. the individual’s consumption capital;
4. the societal and community influences on the individual; and
5. the stressfulness of the individual’s current life situation.

In essence, individuals with a degree of imbalance above a certain threshold are likely to have a biased perception of what the addictive good offers, tending to overvalue the expected benefits and undervalue the expected costs.

Chapter 10 develops a model of preference formation, a model explaining how a person’s preferences for consumer goods change over time and may change for the better or worse. At the heart of the model are four types of preferences (corresponding to four selves): actual preferences, metapreferences, true preferences and unrestrained preferences. An individual’s initial actual preferences reflecting their investment in consumption capital are likely to change to the extent that they differ either from one’s metapreferences or one’s unrestrained preferences. Temptations from the latter could lead to a deterioration of actual preferences. Or the intrapsychic stress that occurs when metapreferences are significantly out of synch with
actual preferences could lead to improved actual preferences. A person’s actual preferences improve when they change toward true preferences, the unique set of preferences that represent what is really and truly the best for that person. Other factors in the model include first, an individual’s predispositions reflecting their endowment of personal capital, and second, the external influences on preference formation reflecting systematic societal or cultural influences. Probably the most novel, and presumably most controversial element in the model, is the idea that everyone has a true self with true preferences and that one’s well-being is inversely related to the gap between one’s actual and true preferences.

Chapter 11 builds on the concepts introduced in Chapter 10 and develops a normative conception of rationality, true rationality, that is arguably more appropriate than the conception used by most economists. This alternative concept of rationality integrates the familiar instrumental rationality (applying reason to choose in order to maximize one’s satisfactions given one’s preferences) with rationality of ends (applying reason to select the ends that are really best). If true preferences represent what is really right and best for a person, not only in the short-term but in the long-term, not only materially and psychologically but morally and spiritually, then the ultimate of rationality, true rationality, means choosing in line with true preferences. Our analysis of true rationality implies that with respect to certain goods there is a likelihood that people will fail to make decisions that fully reflect what is really in their best interests. People may, for example, consume far too little of goods that are really good for them. In this case, there is an argument for government provision of merit goods to rectify this situation. If one aspires to behave in a truly rational manner, this implies that one must transform one’s actual preferences in the direction of one’s true preferences, in the process overcoming one’s neurotic behavior and gaining maturity, emotional balance, and wisdom. In other words, a person would have to make a significant investment in intangible capital, notably personal capital.

Chapters 2 through 11 have either explained about the nature of IC or explained about its contribution to economic growth, well-being, or rationality. Chapter 12 builds on these explanations and develops their implications for government policy. In a number of cases considered earlier, there has been good reason to believe that a particular kind of IC is both critically important for economic growth (or possibly well-being or rationality) and experiencing some kind of blocked growth or development. Further, due to the blockage, the economy is not likely to be realizing its potential. Clearly in such a situation, it makes sense for the government to facilitate a process by which the critical IC formation takes place. The government actions that make the most sense resemble a kind of industrial policy in
which the government is performing a ‘coaching’ role, helping economic
toies improve their behavior and performance through IC formation.
The governmental coach typically helps individuals or firms develop the
pertinent intangible human capacities by nurturing, facilitating, prodding
and otherwise encouraging them. Because the contributions of the more
intangible forms of IC are relatively less understood and accepted, it is
anticipated that persuading people concerning these government policy
implications will not be as easy as it is in the case of standard human
capital.

Chapter 13 is an example of applied economic research relating to the
government’s environmental policy; it is also related to investment in IC.
This chapter (coauthored by Thomas Sadler) proposes a new class of envi-
ronmental policies based on a ‘commitment approach’ (CA) rather than
conventional ‘control-oriented’ policies which rely on the use of regulatory
financial incentives to induce improvements in businesses’ environmental
behavior. While control-oriented policies were designed for firms presumed
to behave like the firms of neoclassical economic theory, policies based on
a CA are designed for the increasingly prevalent high performance organi-
zations which are capable not only of innovative behavior but of making
principled commitments, taking responsibility and acting in a trustworthy
manner. A CA policy is a nonregulatory approach in which firms are self-
regulated. The CA is only for firms that are able first to make a commit-
ment to high environmental performance and second to develop the
capabilities to meet these commitments. Part of the relevant capabilities are
intangible human capacities (IC) necessary for carrying out these firms’
business and environmental commitments. The environmental protection
agency that administers the CA would be charged with selecting the par-
ticular ‘high commitment’ firms that would be subject to the policy. The
potential of the CA is great. The high commitment, high performance
organizations which are selected for a CA can be expected to make high
environmental performance choices that directly benefit themselves as well
as their communities and societies. The initiative and responsibility for
dealing with environmental problems would be with the firms, not the gov-
ernment agency, albeit the agency’s facilitative role may be important.

The IC concept has implications for economics as a discipline. Chapter
14 is concerned with one aspect of this, namely the concept of human
nature in the different schools of economic thought. This chapter compares
economic man, the concept of man at the heart of mainstream economics,
with a variety of heterodox men (the conceptions of man found in the writ-
ings of different heterodox economists) each of whom is more human than
economic man but still not fully human. The backdrop for this comparison
is Ken Wilber’s (1996) comprehensive view of human nature and the
predictable stages of human development he identifies. These different con-
cepts of human nature (economic man and the heterodox men) can be
interpreted as humans who have reached different stages of human de-
velopment, and thus, differ in the extent of their IC (especially personal
capital) formation. Economic man, for example, reflects a relatively low
stage of human development. Humanistic economic man, on the other
hand, arguably reflects the highest level of human development of any of
the heterodox men. Employing a fully human concept of man as part of the
discipline of economics would be ideal, even if it is understood that humans
rarely realize all of their human potential. This is because a broader con-
ception of man makes it easier to conceive of human growth, along with
its various types of IC formation, as an inherent part of economic growth
and development.

Intangible capital, as the next chapter will make clear, is a variety of
intangible human capacities that are critically important for the economy
because they are a key source of productivity, well-being, and true ratio-
nality. Hopefully, the reader of this book will gain a much greater appreci-
ation not only of the nature of and contribution of these intangible
qualities but of their implications for government policy.

REFERENCES

Arrow, Kenneth J. (2000), ‘Observations on social capital,’ in Partha Dasgupta and
DC: World Bank.
Solow, Robert M. (2000), ‘Notes on social capital and economic performance,’ in
Partha Dasgupta and Ismail Serageldin (eds) Social Capital: A Multifaceted
Stiglitz, Joseph E. (2000), ‘Formal and informal institutions,’ in Partha Dasgupta and
Ismail Serageldin (eds) Social Capital: A Multifaceted Perspective, Washington,
DC: World Bank.
Veblen, Thorstein (1919), The Place of Science in Modern Civilization and Other