

Does Culture Matter for Development?

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Abstract

Economists have either avoided or struggled with the concept of culture and its role in economic development. Although a few theoretical works—and even fewer empirical studies—have appeared in the past decades, this paper tries to build on a multidisciplinary approach to review the evidence on whether and how culture matters for development. First, the paper reviews available definitions of culture and illustrates ways in which culture can change

and create favorable conditions for economic development. Second, the paper discusses the challenges of separating the effect of culture from other drivers of human behavior such as incentives, the availability of information, or climate. Finally, the paper argues that globalization has led to the emergence of a set of progressive values that are common cultural traits of all developed economies.

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1. Introduction

It is perhaps entirely understandable that, in looking for factors that have a bearing on the pace and the nature of economic development, economists in academia and policy makers in government have generally focused their attention on tangible phenomena, on things that can be measured and that can be influenced in some way through changes in policy. Indeed, much of what has been done in the past century in the economics profession is to systematize our understanding of economic relationships with a view to using such knowledge to help deliver particular outcomes. Along the way, we have learned that successful economic development is an extremely complex process and that its determinants are many in number and deeply interconnected.

For a variety of reasons, economists have tended to avoid getting too closely involved with the concept of culture and the role it may play in moving a country forward. In the abstract there is no doubt a general acceptance that a particular work ethic, a system of personal values and attitudes must have a role in guiding a population along a particular development path; indeed, how could it be otherwise? But there is a core set of anxieties at the heart of the concept of culture that have discouraged broader public discourse. Landes (2000) understands these anxieties to reflect a certain kind of discomfort with what can be construed as implied criticism of a particular culture. If culture matters for development then there is an immediate danger of attributing particular development outcomes to the *wrong* sort of culture and this may cause injury to identity and self-esteem. “Coming from outsiders, such animadversions, however tactful and indirect, stink of condescension” is how Landes puts it (p. 2). What makes the subject particularly challenging is that there may be instances in which it is not possible to make sense of and explain specific phenomena—for instance, Japan’s emergence in the 20th century as a global economic power—without appealing to the role of culture and its many dimensions.

In the last ten years or so, some researchers have started to study how culture affects economic outcomes, using a conceptual framework derived from economic theory.² Culture can help explain how individuals think, interact with each other, and how they make economic decisions. For this reason, the topic of culture and development is also strictly related with the field of behavioral economics, which focuses on the role of psychological and social factors in an individual’s decision-making process. Further, thanks to the availability of data collected by social surveys such as the World Values Survey and Eurobarometer, economists have been able to test some of these relationships empirically, although much remains unexplored. In particular, although the literature is

² For example, Guiso, Sapienza and Zingales (2006) introduce culture by using two elements of the economics toolbox: *prior beliefs* (probabilities attached to specific events) and *preferences*. They then summarize the existing empirical economic literature on the subject to show that culture affects economic outcomes: first they show that culture affects beliefs and preferences, and then they show that beliefs and preferences affect economic outcomes.

evolving from considering culture as a residual category to trying to model it using the standard economic toolbox, it is unclear how far this approach can go in explaining the economic consequences of cultural phenomena.

In this paper we will gently swim beyond the safe shores of economics and ask ourselves does culture matter for development and, if so, how? We will see that the issues are thorny ones and in many cases contradictory even to those who command the field, and development experts are themselves a little confused about the impact and meaning of culture for economic development. We nevertheless wish to draw the reader's attention to its importance, if only to show the limits of its applicability.

The rest of the paper is organized as follows. We start with a case study – the industrialization of Japan after the Meiji Restoration – to discuss the role of culture as a determinant of economic development (Section 2). We then review different conceptual definitions of culture provided by anthropologists, sociologists, and economists: a key aspect of culture is that it is not fixed, and cultural change opens up possibilities for policy intervention (Section 3). Section 4 presents some examples of the challenges in identifying the effect of culture on economic outcomes, which can be confounded by economic incentives driving human behavior (Section 5), by limited access to information (Section 6) or by “initial conditions” such as climate and geography (Section 7). We conclude by discussing how certain cultural traits may have favored economic development (Section 8) and we argue that one of the consequences of globalization is the emergence of a universal set of values that characterize developed and progressive economies (Section 9). By way of getting started we turn our attention to 19th century Japan.

2. Okubo Toshimichi and the Meiji Restoration

The transformation of Japan into a modern economy is a tale of culture and cultural change. On one hand, the centuries-long transmission of values like honor, loyalty, duty, obedience and discipline contributed in fundamental ways to shape Japan's human capital. On the other hand, a change in mindset – triggered by the personal influence of key political figures – needed to happen in order for the country to devote its efforts to economic development.

Japan's 250-year old feudal shogunate collapsed in 1867-68 and control of the levers of power returned to the emperor in Kyoto. This period is referred to as the Meiji Restoration because the Japanese preferred to think of it as a return to normalcy, rather than as a revolutionary upheaval. The early 1870s saw the beginnings of an impressive period of Japanese modernization that had two central elements: the centralization of political power and the growing role of the state as an agent of economic development. At the center of this process stood a group of a dozen or so reform-minded bureaucrats, of whom Okubo Toshimichi, Home Minister, was the undisputed leader. The will for reform within this group was linked to a combination of several factors of which two central ones were the legacy of the Tokugawa period, with its hierarchical and inflexible social structures which were increasingly seen as anachronistic and ill-suited to the

demands of a modernizing age, and growing perceptions of Japanese economic and military weakness in the face of Western economic and technological advances. Income per capita in Japan in 1870 was lower than that of every country in Europe including Russia, Portugal and Ireland, and was also lower than that of Argentina and Chile. A sense of urgency was heightened by Japan's persistent trade imbalances and the rigors of international competition; cheap English textiles, for instance, put the domestic industry under heavy pressure during much of this early period.

Brown (1962) highlights some of Okubo's assets as a leader in his efforts to push forward a radically modernizing agenda. He was decisive and fearless, unfettered by traditions, with a famous disregard for social rank, not unduly concerned about the possible social stresses generated by rapid change and a constant stream of government initiatives and directives. Japan could not afford to dither and the failure to catch up with the likes of England, Germany and America would put the country's national security at risk. Parsimonious with words, he was highly respected in a warrior culture that prized action above speeches and promises of future action. Okubo had accumulated extensive experience working for people who dealt with a variety of economic and managerial challenges in Satsuma, his region of origin. Shimazu Nariakira, the territorial lord of Satsuma, had been an important early influence, particularly in his successful efforts to turn the sugar industry around, to expand the production of domestic cotton goods, and to invest the resulting profits in the building of an iron furnace, an arsenal and steamships.³

Okubo was relentless in the recruiting of talent for the Home Ministry. His belief that people should be promoted on the basis of merit rather than family or military connections was matched by his conviction that those who had had foreign training were particularly well-suited to assist him in his efforts to launch Japan in a sustained process of modernization. One of his closest advisers, for instance, was Godai Tomoatsu, who, in Satsuma in 1865, had purchased some of the most modern spinning machinery then in existence and had taken several youths for technical training in England, all of whom subsequently joined the Home Ministry in Tokyo. By 1871 some 280 people had been sent to study overseas at government expense, providing a rich harvest of recruits for the Home Ministry and other government departments. Okubo claimed that Japan could never aspire to be a world power unless it abandoned "backward practices", such as the appointment of hereditary territorial lords to positions of influence, instead of abler, more deserving young men.

But perhaps Okubo's most important attribute was his passion for foreign travel and his willingness to examine the broad range of economic and scientific achievements in the developed world and to inspire others at home with a vision of the meaning of a modern Japan. He joined a high-level delegation on a two-year mission (1871-73) to the United States and Europe which consisted in a long series of visits to factories, railways, shipyards, armories and countless meetings with experts to examine and understand the

³ Nariakira is said to have asked his closest collaborators what they feared most of things Western. The unanimous reply had been cannons and warships, to which his reply was "No. It is cotton cloth. Unless we begin preparing now, we shall soon be dependent on westerners for our clothing" (Brown, p. 186).

inner workings of Western business, technology, and government. He wrote admiring letters back home, in which he extolled to his colleagues the virtues of the English transportation network, the textile mills in Manchester, the iron and steel works of Sheffield, the vast reach of the English merchant marine, the thrifty, hard-working and straightforward nature of his German hosts, all of which led him to conclude that Japan was a long way off from comparing “with the more progressive powers of the world.” What emerged out of his foreign travels and those of other colleagues in his inner circle was the notion that emulation of progress in the West was entirely acceptable, technology adoption was desirable as well, and knowledge, techniques, new processes and innovation were the keys to the creation of a prosperous Japan.⁴

Following the introduction of universal public education in 1872 and military conscription in 1873 (which, by extending the right to fight to all men, did much to erase class distinctions and further weakened samurai traditions), the focus of policies shifted to economic development. During a cabinet crisis in November 1873, Okubo prepared a memorandum in which he forcefully set out the reasons against a war on Korea and expansionism: it would lead to a worsening of Japan’s trade imbalances, it would detract from ongoing efforts to build model factories in the country, it would lead to default on debt obligations owed to England which, he argued, would risk giving the English the perfect excuse to turn Japan into another India. The crisis precipitated the departure of several members of his inner group but he won the argument and embarked on a program of reforms with even greater zeal.

Particular attention was placed on export promotion, on improving the quality of Japanese exports, on the development of a merchant marine, reducing Japan’s dependence on the navies of other countries and lightening the burden on the country’s balance of payments of service payments on freight and transportation, the establishment of model factories, and an active program of government loans to small-scale industry.

In hindsight, some historians have noted that Okubo may not have been sufficiently concerned with the income distribution effects of some of his policies: the agricultural sector, for instance, was taxed heavily; the land tax was several times higher than equivalent taxes in other countries. The collapse of the shogunate led to deep grievances in key segments of Japanese society, as hierarchical, tradition-bound samurai, for instance, found it difficult to adjust to the rapid pace of modernization. Their disaffection reached such a pitch that a group of half dozen former samurai assassinated Okubo while on his way to a Council of State meeting in May of 1878. By then, however, the mindset had changed and the pathways of economic development and industrialization become entrenched—Okubo’s associates had no problems moving his program of reforms forward. By the early 1880s the government was divesting itself of factories and state

⁴ There is some irony in the fact that the Japanese delegation failed in the principal objective of the mission which was to persuade trade partners to abolish certain elements of 1850s treaties which prevented Japan from imposing protective tariffs on imported goods. This failure imposed a tougher competitive environment on Japanese firms, particularly in the textile sector, an area of early Japanese comparative advantage.

mills, selling them into private hands. The terms were typically easy and this provided an impetus to industry. Output of cotton yarn rose by several orders of magnitude, contributing to reverse the balance of trade; within thirty years Japan had become a major exporter of cotton yarn and a heavy competitor in world markets. Subsequent phases of industrialization, this time concentrated on machinery, shipbuilding, railroads and other heavy duty items followed in quick succession.

Within a hundred years, Japan's income per capita, less than a third that of England in 1870, had caught up with that of its wealthier Western competitors. In the process, Japan had emerged as the world's second largest economy and one of its foremost technological innovators.

It is beyond the scope of this discussion to trace in detail the development of Japanese industry. What is difficult to argue against, however, is the extent to which a particular work ethic and system of personal values and attitudes—part of what we normally understand as culture—played a central role in Japan's emergence as a world economic power.⁵ Whatever its shortcomings as a system of values, *bushido*, or the Japanese code of conduct of the samurai, had prepared Japan's human capital well for the rigors of 19th century capitalism.⁶ Okubo and his associates undoubtedly made an essential contribution to setting in motion Japan's process of modernization, but they did not work in a vacuum. The country was ready for the next stage of development and was self-confident enough to recognize the superiority of Western science, technology, and organization, without feeling that such recognition would undermine national identity or pose a danger to its internal cohesion.

Like every other people in the world, the Japanese responded to incentives. Japan's high savings rate, for instance, may have reflected the lessons learned during the deprivations of the war period, the relatively late arrival of age-old pensions, the high costs of home ownership. One must, therefore, be careful not to attribute to "cultural factors" what may otherwise be a natural response (e.g., thriftiness) to a particular structure of incentives. But at the same time, it is evident that Japanese values, attitudes, and beliefs were enormously helpful in assisting the country in engaging in a process of modernization. Landes (2000, p. 9-10) underscores the central role played by the schools in forging a national identity that transcended "the parochial loyalties nurtured by the feudal shogunate" and that, in a country "without regular instruction and ceremony" allocated a large share of time in school to the study of ethics and the idea that (to quote from a 1930s textbook) "the easiest way to practice one's patriotism is to discipline oneself in daily life, help keep good order in one's family, and fully discharge one's responsibility on the job." In fact, whether something is perceived as an incentive can be affected by

⁵ Similarly, Deirdre McCloskey in *Bourgeois Dignity* argues that the industrial revolution and the rise of capitalism in Europe were the result of shifting opinions about private property, commerce and free enterprise, rather than the consequence of innovation in technology and markets (McCloskey, 2010).

⁶ Of course, the same cultural traits or values may be drivers of both positive and negative consequences: for example, the ambition to build a stronger Japan may have had a positive influence on economic development, but may have also contributed to the launch of widespread military assaults in the twentieth century.

changes in cultural norms: for example, in the US most tenured full professors continue to be active scholars even though they have no material incentive to work beyond the necessary minimum, but they do so because their professional culture sets high standards regarding what full professors are supposed to do.⁷

The relationship between specific values transmitted to children and economic outcomes has been recently tested in the economic literature, thanks to the availability of data from household surveys which ask questions such as “Do you consider it important to encourage children to learn thrift and savings?” (World Values Survey). Guiso, Sapienza and Zingales (2006) conducted a regression analysis combining survey and macroeconomic data across 53 countries and found that “a 10 percentage point increase in the share of people who think thriftiness is a value that should be taught to children is linked to a 1.3 percentage point increase in the national saving rate”. Tabellini (2010) also showed that European regions with a stronger belief in individual effort tend to have higher GDP per capita and GDP growth.

3. How much does culture count?

The role of culture in economic development is not an easy subject to get a handle on. To start with, one faces issues of definition. As with the rule of law, there are thick and there are thin formulations and the more all-encompassing the definition, the less helpful it tends to be in explaining patterns of economic development. If culture consists of values, beliefs, attitudes, practices, symbols, and human relationships, if it is “expressed through religion, language, institutions, and history”⁸ then it is intrinsically no different than a nation’s genetic endowment. Since it contains everything, in the end it explains nothing.

Economists tend to narrowly define culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation” (Guiso, Sapienza and Zingales, 2006). As the researchers openly admit, this approach is far from being comprehensive and it is largely dictated by the need to facilitate the identification of causal relationships, by focusing on aspects of culture that are inherited and constant over time.

Not surprisingly, some of the most insightful writing on the subject of culture has been done by anthropologists. Murdock (1965), for instance, argues that a culture consists of habits that are shared by members of a society, whether a primitive tribe or an advanced nation. It is the product of learning, not of heredity. “The cultures of the world are systems of collective habits. The differences observable among them are the cumulative product of mass learning under diverse geographic and social conditions” (Murdock, p. 113-114).⁹ Woolcock’s (2014) recent review of the sociological literature on culture and

⁷ We thank Michael Woolcock for this comment and this example.

⁸ Temin, 1997, p. 268.

⁹ In a review of the concept of culture as it has emerged in the anthropology literature Ortner (1984, p.129) argues that “culture is not something locked inside people’s heads, but rather is embodied in public symbols, symbols through which the members of society communicate their worldview, value-orientations,

development highlights how scholarship has evolved to consider culture as “shaping a repertoire or ‘tool kit’ of habits, skills, and styles from which people construct ‘strategies of action’” (Swidler, 1986, p.273).

A second complication is that even if one could come up with a sensible definition¹⁰, one would have to confront the fact that *cultural identity is not fixed*. It interacts with history, it is affected by the process of development itself, it is surely shaped in many ways by the rise and dissemination of technology and scientific ideas. It can even change or be affected by major trauma—witness the transformation of Germany in the 20th century from a militaristic and expansionist power to one strongly committed to non-violence and pacifist values in the wake of the collapse and destruction associated with the Second World War. Indeed, on reflection, one can reasonably make a similar argument about Europe more generally: 800 years of intermittent war, conflict and violence leading finally to two world wars in the 20th century, and now the permanent abandonment of warfare as a means of resolving interstate conflicts, resulting in the formation of the European Union. Traveling through Eastern and Central Europe in the late 1980s, one might have been forgiven to think that several decades of Soviet-style central planning had killed all entrepreneurial spirit and turned the population into wards of the state. It took these countries about a decade and a half to transform their economies and political systems sufficiently to gain EU membership in 2004, an eloquent example of the way in which appropriate incentives can shape and change critical features of the cultural landscape. Even the concept of ethnicity, which economists typically consider as an “exogenous” variable, is at the center of a major debate in the sociological literature as reviewed by Woolcock (2014): some scientists argue that ethnicity is a fixed demographic category and others consider it a “fluid social construct, one whose political salience varies considerably across time, space and units of analysis” (p. 11), or “a *product* of prevailing political processes rather than a determinant of them” (p.12).

In fact, anthropologists have long studied the factors that have contributed to cultural change and the processes by which such changes take place. According to Murdock (1965, p. 116) “increases or decreases in population, changes in the geographical environment, migrations into new environments, contacts with peoples of differing culture, natural and social catastrophes such as floods, crop failures, epidemics, wars, and economic depressions, accidental discoveries, and even the death or rise to power of a strong leader” are classes of events that can precipitate cultural change. Cultural change—anthropologists tell us—begins with processes of innovation, of which cultural borrowing or diffusion is by far the most common. Examine the basic elements of *any* culture and the overwhelming majority turns out to have been the result of borrowing,

ethos, and all the rest to one another, to future generations—and to anthropologists.” It is a product “of acting social beings trying to make sense of the world in which they find themselves”...”is not some abstractly ordered system...its logic derives from the logic or organization of action, from people operating within certain institutional orders, interpreting their situations in order to act coherently within them” (p. 130).

¹⁰ “The customary beliefs, social forms, and material traits of a racial, religious or social group,” or “the customs and civilization of a particular people or group” are two competing definitions from Webster’s and the Oxford American dictionaries, respectively.

with the extent of borrowing proportionate to the intensity and duration of the interactions between cultures. Of course, trade, political conquest, intermarriage, and the organized activities of missionaries, are all factors that will have contributed to cultural borrowing. Murdock observes that modern American culture provides a good example of the extent to which borrowing or diffusion shapes the underlying culture. Its language comes from England, the alphabet from the Phoenicians, the numerical system from India, and paper and printing from China. Its system of real property is derived from medieval Europe and its religion is a composite of pieces brought together from the ancient Hebrews, Egyptians, Babylonians and Persians. Paper money is from China, metal coinage from Lydia, checks from Persia, the banking system (including credit, loans, discounts, mortgages) in its modern version comes from Italy and England. Domesticated plants and animals, virtually without exception, are borrowed from other cultures and vanilla and chocolate, the favorite American ice cream flavors, were borrowed from the Aztecs.

But cultural change can also be precipitated by social acceptance (the initial adoption of a new habit by a small number of individuals which then, over time, is shared by an increasing proportion of society)¹¹, by selective elimination (as when certain cultural habits are abandoned because they no longer provide the same degree of social satisfaction due to changes in the underlying environment) and by integration—as when the shared habits that make up a culture adapt to each other through processes of reciprocal interaction.¹² Murdock notes that the combined effect of the processes which trigger cultural change is “to adapt the collective habits of human societies progressively over time to the changing conditions of existence,” and that “however halting or harsh it may appear to participants, cultural change is always adaptive and usually progressive. It is also inevitable, and will endure as long as the earth can support human life.”¹³

Cultural change and its determinants are a largely unexplored issue in the economic literature. Very few economists have studied the relationship between culture and economic outcomes, and even these few have analyzed how certain aspects of culture affect economic outcomes, rather than how culture can change as a result of economic development. The few exceptions belong to the branch of economic literature which challenges the classic assumption of exogenous preferences: Bowles (1998) suggested a number of ways in which markets and other economic institutions can affect preferences, by inducing “specific behaviors - self-regarding, opportunistic, or cooperative, say -

¹¹ Bikhchandani and others (1992) propose a political economy model in which large shifts in mass behavior can be determined by small shocks as a result of ‘information cascades’, that is, situations in which “it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information.” (p.994).

¹² Kuran and Sandholm (2008) argue that the process of cultural integration in fact undermines multiculturalism, because it tends to homogenize preferences. On the other hand, in his 2002 book *Creative Destruction* Cowen argues that “cultural homogenization and heterogenization are not alternatives or substitutes; rather, they tend to come together.” (Cowen, p.16). Further, he affirms that cross-cultural exchange “expands the menu of choice” and, “while it will alter and disrupt each society it touches, will support innovation and creative human energies.” (Cowen, p.17-18).

¹³ Murdock, p. 128.

which then become part of the behavioral repertoire of the individual.” (p.80). Palacios-Huerta and Santos (2004) develop a general equilibrium model in which attitudes towards risk are a function of exposure to market risk and market incompleteness. However, most of such contributions are theoretical and openly call for further empirical research to assess the magnitude of these effects.¹⁴

From a policy perspective, understanding the relationship between aspects of culture that are malleable and economic development would be more interesting, as it would open up the possibility for intervention. Naturally, this possibility would be likely to generate heated debates. The World Bank’s 2015 World Development Report – which builds on evidence from behavioral sciences – cites a number of examples of interventions that have determined a cultural change to trigger improvements in welfare: one example is political affirmative action for women in West Bengal, where men used to have a biased opinion of women in leadership positions. As a consequence of the intervention, the gender gap in schooling was reduced.

Going back to the Japanese example, certain attributes from two and half centuries of samurai culture may have facilitated Japan’s fast modernization (discipline and frugality come to mind), but we have seen the potent role played by the Meiji government’s thirst and admiration for foreign technologies and know-how, its readiness to expand trade with the West, and its decision to prioritize economic development over military adventures. Crucial for Japan’s success was the recognition of the superiority of Western science and technology and thus, implicitly, the acceptance of the inadequacy of purely Japanese ways. What was needed was the opening of Japanese culture to the potential benefits of interactions with other cultures abroad, which were at a more advanced stage of development. These interactions helped release the power of favorable Japanese cultural traits, contributing along the way to change and to the enrichment of Japanese culture itself. Of course, this process was symmetric. Japan’s own development has had a tangible influence on the development of other countries. In a 1994 interview with *Foreign Affairs*’ Fareed Zakaria, Lee Kuan Yew, Singapore’s patriarch, spoke of the advantages of being able to look at Japan as a role model, providing his country with a sense of direction and a vision of “what the end result should be.” Similar remarks would apply to Korea and Taiwan, two other Asian success stories. So, 20th century Japan, with its formidable industrial sector and its well-developed innovation capacity, has been a source of ideas, technologies and know-how to the rest of the world and has thus helped shape and change the cultures of other countries.

¹⁴ An example from the empirical literature is the paper by Bertrand and Schoar (2006), which analyzed how family values measured by the World Values Survey changed across 19 countries and over the period 1980-2000. They concluded that family values appear to be quite stable even in countries with fast growth rates and across generations. On the other hand, Miguel and others (2006) examined the relationship between industrialization and changes in measures of social networks in Indonesia over the period 1985-1997: the interpretation of their results suggests that social interaction increased in rapidly industrializing districts, while it might have decreased in districts from which people migrated towards more industrialized areas.

4. When does culture matter?

There are other complications, however, in attempting to use cultural explanations for nations' economic development. For instance, Lee Kuan Yew speaks of a set of values—"thrift, hard work, filial piety and loyalty to the extended family, and, most of all, the respect for scholarship and learning"—as having provided a powerful cultural backdrop for the development of East Asian countries, a Confucian-based ethic at the foundation of East Asian prosperity. The problem, of course, is that when one examines China's development—the last two and a half millennia, corresponding to the period under the presumed spiritual and moral guidance of Confucius—one can discern periods of remarkable creativity and progress, leading to the invention of printing, paper, the compass, gunpowder, porcelain, silk, all contributing in various ways to the advancement of civilization, but one can also note periods of backwardness, decay and mass killing. For instance, why China failed to realize its great scientific potential and in the middle ages fell hopelessly behind Europe is an intriguing question. Several explanations have been put forward by sinologists, among which the role of the state figures prominently. At one level, the lack of a well-defined framework for property rights and the absence of a free market seem to have been lethal. "The Chinese state was always interfering with private enterprise—taking over lucrative activities, prohibiting others, manipulating prices, exacting bribes, curtailing private enrichment."¹⁵ During the Ming dynasty (1368–1644), serious attempts were made to shut down all trade with the outside world, efforts which in turn led to the proliferation of smuggling, rent-seeking, corruption, and violence. Indeed, in the early part of the 15th century China was the preeminent naval power in the world, with Admiral Zheng He leading armadas (1405-1430) around the Indian Ocean and beyond of up to 62 ships, some of them 5 times larger than the typical Portuguese caravel. But in 1433 the Ming emperor banned foreign travel, the state archives were purged of all records pertaining to the construction of Chinese vessels and these were destroyed. Even sea transport of supplies along the Chinese coast from south to north was proscribed.¹⁶

The sinologist Etienne Balazs puts the blame for China's still-born technological prowess squarely on the emergence of totalitarian control:

The word 'totalitarian' has a modern ring to it, but it serves well to describe the scholar-officials' state if it is understood to mean that *the state has complete control over all activities* (emphasis in original), absolute domination at all levels...Nothing escaped official regimentation. Trade, mining, building, ritual, music, schools, in fact the whole of public life and a great deal of private life as well, were subjected to it...A final totalitarian characteristic was the state's tendency to clamp down immediately on any form of private enterprise (and this in the long run kills not only initiative but even the slightest attempts at innovation), or, if it did not succeed in putting a stop to it in time, to take over and nationalize it...Most probably

¹⁵ Landes, p. 56

¹⁶ Landes (1997, p. 641) invites us to contrast this with "the bulimic appetite of European sailors, their greed cloaked with missionary virtue, ready to venture on unknown seas in small boats and to put up with months of verminous crowding and famine to get their hands on the riches of the Indies, nothing deterred by failure or disappointment, each voyage a stepping stone to the next. Once they caught the whiff of wealth in their sails, no change in government policy, no want of official support, was going to stop them."

the main inhibiting cause was the intellectual climate of Confucianist orthodoxy, not at all favorable for any form of trial or experiment, for innovations of any kind, or for the free play of the mind. The bureaucracy was perfectly satisfied with traditional techniques. Since these satisfied its practical needs, there was nothing to stimulate any attempt to go beyond the concrete and the immediate.¹⁷

At least one author has suggested that an additional factor in explaining the abortive nature of China's economic and technological potential stemmed from the confinement of women to the home, which severely restricted the employment of women outside of the household and limited the supply of female workers to labor-intensive industries, such as textiles.¹⁸ No need to go into great length here into the mindless excesses of the Mao era—the abuse, the needless suffering, the fanatical attachment to spent ideologies and false theories, the unfathomable social and human cost.

So, what dimension or period of Chinese development is properly explained by its alleged adherence to a Confucian ethic? How helpful is Chinese “culture” in explaining China's rapid economic development during the past quarter century? Maybe China's recent rapid growth has less to do with Chinese values per se, and more to do with the forces unleashed as a result of integration with the global economy, or efforts to introduce more secure property rights, or the active encouragement of internal migration from the country side to the cities. A macroeconomist might point to currency manipulation and an artificially weak exchange rate as being an important engine of Chinese economic growth over the past two decades. Incidentally—to add a further complicating issue—why have the Chinese living abroad (Thailand, Malaysia, Singapore, Indonesia come to mind) tended to do so much better than those staying home?

In thinking about the development experience of other countries beyond China or East Asia, we find cultural explanations of economic performance to be saddled with complications, which tend to obscure rather than clarify the issues. Let us take up quickly a couple of examples.

In his contribution to *Culture Matters* Samuel Huntington (2000) comments on coming upon economic data on Ghana and Korea in the early 1960s and being astonished at how similar their economies were: broadly comparable levels of income per capita, a similar structure of production, and roughly equal levels of foreign aid. Thirty years later the contrast could not be more pronounced: Korea is a rich industrial power with a large footprint in the global economy and Ghana has remained more or less where it was at the time of independence, except that its per capita GDP is one-fifteenth that of Korea.¹⁹

¹⁷ Balazs, Etienne, 1964, pp. 13–27.

¹⁸ Goldstone, 1996. He further states: “In northwest Europe, with its pattern of late marriages and nuclear families, there existed a stage in the life course of most women—between puberty in their early teens and marriage in their mid-twenties—when they were available for labor and routinely performed work for wages outside their natal households. *No such stage existed in the life course of Chinese women, at least from the Ming through the end of the Imperial era (to 1911)* (emphasis in original). This would have posed a great obstacle to the creation of textile factories along the lines of their development in Europe and North America at any time in China's late Imperial history” (p. 3).

¹⁹ By 2008, the PPP adjusted ratio of Korean to Ghanaian per capita GDP was actually 18.2, not 15.

Huntington then observes: “How could this extraordinary difference in development be explained? Undoubtedly, many factors played a role, but it seemed that culture had to be a large part of the explanation. South Koreans valued thrift, investment, hard work, education, organization, and discipline. Ghanaians had different values. In short, cultures count.”²⁰ The problem with this formulation is that it quickly suggests that Ghanaians live beyond their means, are lazy and uneducated, disorganized and undisciplined. Such a message does not provide a very auspicious basis to start a dialogue with Ghana as to how they could catch up with Korea. Not surprisingly, while not necessarily rejecting the importance of culture in shaping a nation’s political and economic development, international financial organizations, bilateral donors and others have tended to shy away from framing the debate in terms of cultural norms. But this is not all. Beyond issues of presentation or packaging, or the particular way in which one frames the debate, it is possible that “culture”, in fact, disguises other forces at work, that what appears to be culture is actually something else, more amenable to change, less fixed in a nation’s “genetic” code, as many might think laziness and disorderliness to be.

Another problematic example is that raised by comparing Chile and Argentina, two countries sharing a border actually longer than that between the continental United States and Canada and a broadly similar culture, with strong Catholic underpinnings. Over the past quarter century Chile has had sustained, fast economic growth—its recent admission to the OECD, the rich-country club, is explicit recognition of its success in implementing credible economic and institutional reforms that have reduced poverty faster than anywhere else in Latin America and in giving the country the highest credit ratings in the region. By way of contrast, Argentina was a G10 power in the first part of the 20th century and had the best scientific and higher education infrastructure in Latin America by the 1950s²¹, but has since *regressed*, in the wake of decades of economic mismanagement, to an economy with all the characteristics of Michael Porter’s factor-driven stage of development (1990). This regression was caused, in particular, by an undue reliance on exports of primary commodities as the principal source of economic growth, high levels of corruption and, in an unusual recent turn, the gradual disappearance of reliable statistics, as a result of authoritarian, state-sponsored tampering and manipulation.²² The widely divergent development paths of Chile and Argentina can be explained on the whole by differences in economic policy and choices made by successive governments in both countries to introduce coherent and well-formulated reforms (in Chile) or quite otherwise in Argentina, of which the cooking of economic data is perfectly emblematic. No need for “cultural” explanations to grasp these countries’ recent economic histories.²³

²⁰ Huntington, p. xiii.

²¹ Until relatively recently Argentina was the only country in Latin America whose citizens have earned Nobel prizes in science, with three awards going to Messrs. Houssay (Physiology or Medicine), Leloir (Chemistry), and Milstein (Physiology or Medicine).

²² See, for instance, “Hocus-pocus: The real world consequences of producing unreal inflation figures.” *The Economist*, 14 June 2008, p. 56. A more recent assessment by *The Economist*, commenting on mid-term elections suggests that inflation figures are worth little because: “Mr Kischner put stooges in the statistics office and they massage the numbers.” (See: “A chance to change course.” 20 June 2009)

²³ On the Chilean experience see López-Claros (2004).

Culture is even less useful in helping us understand 74 years of communism in the Soviet Union and the eventual collapse of that particular experiment. What particular cultural traits predisposed the Russian people to the long Soviet nightmare?

5. Role models and incentives

If there is a key insight that emerges from Meiji Japan and Okubo Toshimichi and associates it is that a country's culture is strongly influenced by prevailing ideas, including the particular model that underpins its economic development. In 19th century Japan the model was small, insular but highly disciplined England, the leading scientific innovator of the time, an industrial giant actively seeking to project power abroad. In the 20th century Soviet Union the prevailing economic paradigm was central planning, an ideologically driven system (non-system is a more apt characterization) in which government bureaucrats (or, more accurately, loyal Communist party members) made all the decisions about the production, distribution and prices of goods and services, in which there was no scope for private property and entrepreneurial initiative and where, because there was no price system in place, people had no idea about the scarcity or value of things. As a result, there were widespread shortages of certain goods and massive production of others (e.g., weapons), all in a context of enormous waste and utter disregard for the environment. To this one must add willful ignorance about the operation of the international economy elsewhere in the world, coupled with a steady refusal to acknowledge the system's obvious inefficiencies and its implicit opportunity costs. In such a system it did not matter very much whether one actually was a believer or not. (By the time one of the authors arrived in Moscow in early 1992, central planning had run its course, sinking the Soviet Union into oblivion and impoverishing an otherwise highly educated nation—however, the Communist party would continue to have millions of supporters for many years to come and even gave Boris Yeltsin a scare in the 1996 presidential election). What mattered was that central planning was a system of (perverse) incentives which inevitably had an effect on people's behavior. It is worth repeating: people respond to incentives, whether these are intelligent or perverse.

It is an interesting question whether the Communist party established a new culture in the Soviet Union in the sense in which we have used the term in this discussion. One is tempted to say that it must have done so—Communism comprised after all a particular set of values, habits, beliefs and attitudes, all underpinned by a fairly complex institutional infrastructure. But it was largely imposed through terror and repression. Stalin sent millions to their deaths as part of his campaign to create a new egalitarian "culture." But, to the extent that it was coerced, it was also unreal. Were people's values willingly held and thus authentic, or were they simply rational accommodations to the prevailing orthodoxy, moral compromises made in an effort to survive, to eat, to make something out of one's own life? If the answer to this last question is that these values—for the majority anyway—were not authentic, then Soviet culture was a mirage and thus not particularly helpful in enabling us to understand that country's economic and political development. In the Soviet Union, culture, in fact, *did not matter*, and one must look for other factors in our search for a better understanding of its development, as Huntington

wanted to explain and understand Korea's transition to rich-country status. So, to take an example, the absence of a work ethic in the Soviet Union was not a reflection of laziness and indiscipline (i.e. culture), but rather was a natural response to an environment in which wage differentials were extremely narrow, promotion was not linked to performance, and life-time employment was more or less guaranteed. People's behavior at work was totally consistent with this particular set of dis-incentives. (During a recent visit to Moscow the author was very impressed by the exquisite courtesy and efficiency of the hotel staff—a sharp contrast to the hostility or indifference of their peers in the early 1990s—a competitive labor market in Russia has clearly done wonders for the quality of service).

Here we consider another example of the role of incentives in shaping different dimensions of the development process—this time from 17th and 18th century India. Landes (1994) tells us that at this time India was the world's leading producer of cotton goods and had a major presence in the Asian markets, both in terms of quantity and quality. Demand for these goods was also heavy in Europe, with “trading companies (falling) over one another in the effort to secure pieces for import.”²⁴ However, economic historians have noted that strong demand from trade partners abroad did not lead to any improvements in the underlying technologies of Indian production, as was the case in 18th century Britain. At least one plausible (and possibly partial) explanation for this puzzle was that, unlike Britain, where labor was scarce and there were powerful incentives to find mechanical substitutes for human skills, India had an inexhaustible supply of cheap labor, readily available to use existing technologies. Indians were not necessarily less inventive than the British—they just operated in an environment in which the economic incentives for invention and innovation were different (or largely absent) from those prevailing in Britain and this had an impact on behaviors, effort and priorities. There may have been purely cultural factors at work as well, but clearly they would not tell a major or even perhaps a small part of the story.

Was the Soviet Union a special case? Might culture per se not matter very much (or matter very little) in other parts of the world? The Soviet Union (and China under Mao, and Cuba under Castro, to name a few) was a case of a people (to quote Michael Porter) with the “misfortune of being guided by flawed theories.” The authors' opinion is that while the Soviet Union may have been an extreme case of flawed theories, made worse by a fanatical attachment to certain ideological postulates (e.g., government ownership of all the means of production, the abolition of private property, and the like), it was far from being the only place in the world with people living under such unfortunate circumstances. To come back to Ghana in the early 1960s: ironically, many thought that Ghana, because of its rich natural resources, would be a safer bet than South Korea over the longer-term, with its poor resource endowment and its complicated geopolitics at the end of the Korean war. How much of Ghana's stunted development—its divergence from the potential which many saw at the time of its independence—is due, as Huntington suggested, to culture, and how much of it is simply the result of bad policies, so bad, in fact, that they have spawned corruption, political instability and the numerous ills that

²⁴ Landes, 1994, p. 642.

have beset the country during the last several decades? Political instability in many developing countries, in turn, has led to a certain inability to look beyond the next year, an unwillingness on the part of investors to plan for the long-term because of the associated risks. In a nutshell: what may appear to be cultural traits may, in fact, be behaviors shaped by economic incentives and thus amenable to change through changes in the underlying incentives. From this perspective, poverty and underdevelopment is less the result of culture and is more what happens when economies malfunction, when the software that drives them has broken down or is no longer relevant for the time and the place. A good example of this is provided by the relative success of various ethnic or national diasporas all over the world, often highly successful abroad, suggesting that the backwardness at home may have had more to do with the underlying policy framework and system of incentives rather than particular cultural attributes. This would suggest the need for caution, lest one is unduly pessimistic about countries or continents allegedly under the influence of the wrong kind of culture.

6. Culture as mirage

Let an anthropologist weigh in on the Korea versus Ghana debate. According to Murdock (1965), the following elements are common to both cultures: athletic sports, bodily adornment, calendar, cleanliness training, community organization, cooking, cooperative labor, cosmology, courtship, dancing, decorative art, division of labor, dream interpretation, education, eschatology, ethics, ethnobotany, etiquette, family, feasting, fire making, folklore, food taboos, funeral rites, games, gift giving, government, greetings, hair styles, hospitality, housing, hygiene, incest taboos, inheritance rules, joking, kinship nomenclature, language, law, luck superstitions, magic, marriage, mealtimes, medicine, modesty concerning natural functions, mourning, music, mythology, numerals, penal sanctions, personal names, population policy, postnatal care, property rights, propitiation of supernatural beings, puberty customs, religious ritual, residence rules, sexual restrictions, soul concepts, status differentiation, surgery, tool making, and trade. In fact, argues Murdock, cross-cultural similarities are even more pronounced than suggested by this list when one analyses individual items and discovers further commonalities. For instance, that languages—to be found in every culture—can be broken down into its constituent components—phonemes, words or combinations of phonemes, grammar or rules for bringing together words into sentences, and so on, or funeral rites, which in all cultures contain expressions of grief and a method for disposing of the body. Anthropologists will thus argue that although behaviors across cultures will differ (e.g., eating rice with chopsticks or otherwise), “all cultures are constructed according to a single fundamental plan—the ‘universal cultural pattern’” a concept based on the “psychic unity of mankind”, the assumption that “all peoples now living or of whom we possess substantial historical records, irrespective of differences in geography and physique, are essentially alike in their basic psychological equipment and mechanism, and that the cultural differences between them reflect only the differential responses of essentially similar organisms to unlike stimuli or conditions.” Or, *unlike incentives* Murdock (p. 91) might have convincingly added.

Of course, attachment to flawed theories also has to do with lack of appropriate education, lack of adequate access to reliable information and sources of knowledge and relevant experience. The Soviet Union—and the central planning system—endured three-quarters of a century because the Communist party foreclosed the avenues for self-examination; its tight control on the flow of information, its jamming of the airwaves, its restrictions on international travel, on what people could read, on the sorts of ideas which could be freely traded in the broader society, ultimately on the lifestyles that could be freely pursued (to say nothing of its willingness, as needed, to kill), permitted it to sustain a fiction that, at its core, claimed Soviet socialism to be a legitimate alternative model for social and economic organization and development. As long as people remained in the dark, as long as they could not come to their own independent judgments as to whether this was actually so, the system could go on. In fact, the system could also be exported to other places, or imposed by force, as was done in Central and Eastern Europe. It is quite possible that freed from its brutally coercive elements, imbued with a modicum of intellectual integrity and capacity for self-criticism, Soviet socialism could have evolved and avoided the painful collapse and implosion which came upon it in the early 1990s. We tend to understate the importance of education and the free access to knowledge and information and the exchange of ideas and experiences as a catalyst for changing peoples' values, attitudes and beliefs and, thus, as a tool to shape the evolution of culture and, of course, the economic system.

7. Climate and geography

In an article on the new sociology of socialism, Jeffrey Sachs (2000) identifies a number of factors which have fundamentally affected the nature and pace of development in various parts of the world, factors which can, in principle, be detached from conceptions of culture. He notes, for instance, the advantages of geography, such as access to natural resources, or to navigable rivers and the sea, or the relative disadvantages of remoteness, of being landlocked or part of a poor, volatile neighborhood. Landlocked countries face higher transportation costs and, in general, find it more difficult to integrate into global markets. True, Switzerland is landlocked, but it is surrounded by countries with open markets and themselves well connected to the sea and to modern transportation networks. Uganda, on the other hand, is surrounded by a combination of failed states, stagnant economies and countries in the grip of civil war. Temperate zones, Sachs observes, are vastly more developed than tropical ones—28 of the 30 richest countries in the world are located in temperate climates. The tropics have traditionally lagged behind because tropical agriculture is less productive (high soil erosion and exhaustion under rain forest conditions, high incidence of pests), and because infectious diseases has been much more prevalent than in temperate zones, leading to lower life expectancy, lower labor productivity and less educated populations.²⁵ In an article discussing the role of climate

²⁵ According to Harrison (1979, p. 603) “studies of the effects of temperature on Western workers usually show a loss of output of 2 to 4 percent for every rise in temperature of one degree centigrade”. He also notes (p. 602): “the tropical rainforest sheds three times as much weight of leaves as a temperate forest. But the bacteria that break up decaying vegetation also work faster. Up to a temperature of 20 °C, humus forms faster than it is broken down, enriching the soil with nutrients and improving its structure. Above 20 °C the

on the economic development of nations Lambert (1971) presents a fascinating graph called “The Coldward Course of Progress,” which shows that over the past 5,500 years the mean annual temperature at flourishing centers of civilization has been falling steadily. From the fertile valleys of the Tigris and the Euphrates, to the Nile Valley, to Athens, Cordoba, China, and Florence, on to London, Paris and New York (to name only a handful of the over three dozen centers shown in the graph), the fall in average annual temperatures has been relentless. The centers of civilization moved northward until the latitude was high enough that it provided a permanent defense against debilitating parasites. This was further facilitated by improvements in the technology underlying agriculture, which permitted a surplus.²⁶ According to Lambert, climate has been an important factor in explaining the absence of highly developed countries in the tropics or subtropics. Culture has little place in this discussion.

Countries at various times have also come under the influence of different social systems and some of these—serfdom, slavery, communism—have been lethal for human prosperity and economic growth. Because two thirds of the world’s population is concentrated in temperate zones, these countries have also benefitted from higher demand, from economies of scale and the positive feedback mechanisms that can operate in a context of technological change, where innovators and their ideas tend to reinforce each other in a chain reaction that creates fertile soil for future improvements in productivity. All of this suggests that in trying to understand the roots of successful economic development, the initial conditions matter a great deal. William Easterly discusses the heavy burden on Africa associated with the historically arbitrary and at times perverse demarcation of international borders. He says: “First, the West gave territory to one group that a different group already believed it possessed. Second, the West drew boundary lines splitting an ethnic group into two or more parts across nations, frustrating nationalist ambitions of that group and creating ethnic minority problems in two or more resulting nations. Third, the West combined into a single nation two or more groups that were historical enemies.”²⁷

Not surprisingly, the data show that countries with a high share of partitioned peoples are less democratic, more corrupt, have a weaker rule of law and have a poorer delivery of government services. Easterly adds: “the straight hand of the colonial mapmaker is discernible in development outcomes many decades later.”²⁸ Indeed, a legitimate question to ask is whether some of the countries that emerged out of colonial rule were not saddled with such burdensome structural and institutional liabilities as to be essentially unviable as independent political entities. We have accepted these borders as

bacteria work faster than the supply of dead vegetation: is this perhaps the key to the deadly significance of the 20 °C isotherm?”

²⁶ Lambert quotes a parasitologist for whom the connection between parasites and economic development is apparently obvious: “Hookworm infestation is primarily (located)...in a great belt encircling the globe, taking in all of the tropical and subtropical regions of the world, inhabited by more than half of the total population of the earth. It is bounded approximately by the 36th parallel in the north and the 30th parallel in the south.”

²⁷ Easterly, 2006, p. 291.

²⁸ Ibid., p. 293.

given, part of an immutable international order, but have not paused to think about the extent to which they are undermining economic development strategies, to say nothing of the hopelessness and cynicism which they generate in the countries where such strategies fail, year after year. Particularly important in this regard would be the lack of physical safety and security in many countries in Africa and elsewhere (e.g., Haiti) which fundamentally undermine the stability of interactions between economic agents. It may well be that physical security is a *necessary* starting condition to give economic development a chance to get started. So, in Africa at least, poverty and underdevelopment may have more to do with geography and climate, with the internal politics of natural resource management, and with the toxic interactions between ethnic diversity and artificial borders creating conditions of physical insecurity, with purely cultural factors playing a subsidiary role.

8. Knowledge and technology

Max Weber famously made the case about the role of culture in development in his essay “The Protestant Ethic and the Spirit of Capitalism,” arguing that Protestantism promoted the rise of modern capitalism “by defining and sanctioning an ethic of everyday behavior that conduced to business success” comprising “hard work, honesty, seriousness, the thrifty use of money and time (both lent us by God)” (Landes, p. 175). Weber’s tribute to Protestantism and its influence in the rise of industrial capitalism is not without its complications. Temin (1997) makes the valid point that Weber made his case largely in reference to Calvin and other 16th century dissidents’ vision of Protestantism. But the rise of industrial capitalism did not happen until close to 300 years later and it manifested itself not in the lands of Calvin and Luther but in Britain. De Long (1988) makes the additional point that it was not at all clear that Protestantism initially was all that friendly to the spirit of a capitalist economy: “Strong Protestantism—Calvin’s Geneva and Cromwell’s Republic of the Saints—saw theology and economy closely linked in a manner not unlike the Ayatollah’s Iran. And religious fanaticism is not often thought of as a source of economic growth”²⁹ It was not until the late 18th/early 19th century that profit seeking and wealth accumulation had become morally acceptable attributes in countries that had committed themselves to a Protestant religious tradition. Temin suggests that the culture of Protestantism was beneficial only in the presence of a particular set of technologies and organization, which did not appear until well after the Protestant Reformation: “In the age of hand-crafted products, Protestants and Catholics were economic equals. But when it became necessary to invest in factories and machinery to exploit a new technology, then the culture of Protestantism was a decided advantage.”^{30 31}

²⁹ De Long, 1988, p. 1146.

³⁰ Temin, p. 269.

³¹ Regardless of the exact dynamics of the causal chain between religion and the rise of capitalism, it is evident that a crucial aspect of culture such as religion is related with economic attitudes and outcomes, even in contemporary society. Guiso, Sapienza and Zingales (2003) use cross-country survey data to show that Catholics and Protestants are more likely than nonreligious people to consider teaching thrift to their children important. Further, in the US, Catholics, Protestant and Jewish respondents have a more negative attitude toward redistribution compared to respondents with no religious association. Barro and McCleary

The ethic of everyday behavior that was seen as an advantage was a combination of individualism and accomplishment and a belief in the legitimacy of man's mastery over nature. It was epitomized in Adam Smith's analysis of the division of labor in *The Wealth of Nations*, where the key to enhanced productivity consisted in the separation of the individual in the workplace and his specialization in a narrow set of tasks, generally in the context of a small firm in which the organization of activity was as important as the underlying technologies being used. At the same time, a belief in the idea that man could have mastery over nature enhanced social capabilities to assimilate the latest technologies and legitimized the pursuit of science and knowledge for their own sake. The availability of survey data has now made it possible to empirically test the relevance of these values for economic and social development. For example, Licht, Goldschmidt and Schwartz (2007) show that countries whose citizens favor autonomy (as opposed to embeddedness), egalitarianism (vs hierarchy), and mastery (vs harmony with nature) have higher rule of law, less corruption, and more democratic accountability.

One important additional dimension of organization was the recruitment of women and children into the workplace which reduced costs and prices, boosted demand and contributed to deepen the reach of the industrial revolution. The sense of individualism and empowerment, widespread in Britain, which promoted innovation and self-improvement, may also explain some features of the geographic spread of the industrial revolution, very quickly making its way into New England but taking one hundred years to make its way into northern Italy. So, even in the most famous case of culturally determined economic development—the alleged superiority of a Protestant ethic during the industrial revolution in Britain—we can see that there are many other factors at work which interact with culture or act independently of it or in conjunction with it, to suggest considerable caution in attributing to culture more than a peripheral role.³²

To say that “culture matters” or to claim, as David Landes (2000) does that “culture makes almost all the difference” is to state an important truth, but only in the sense that genes matter and that good genes make a good part of the difference. No doubt true, but difficult to operationalize, and even more problematic as a guide to policy. We think one can make a case that our understanding of *culture* is changing, that it is being shaped by the forces of globalization and by the impact of government policy. Our understanding of the key drivers of economic prosperity has evolved over time; in the pre-globalization days the existence of competing economic paradigms and systems may have heightened the role played by certain cultural factors. In time, we also came to acknowledge the role of natural resources (for better or for worse), population dynamics, technology,

(2006) also use survey data to show that stronger religious beliefs have a positive effect on economic growth. Kuran (2004) argues that three Middle Eastern institutions rooted in religion constituted obstacles to the economic development of the region: these were the Islamic law of inheritance, the lack of the concept of corporation in the Islamic law, and the waqf, an Islamic form of trust.

³² De Long (p. 1147) makes the additional point that Protestantism is correlated with other things, such as specialization in manufacturing, a high investment ratio, and northern latitude. And, of course, neither Japan nor Italy, two countries that successfully converged in the 20th century to the upper ranks of the rich had much connection with the Protestant ethic.

organization, geography and climate, and a country's ability to project military power abroad, as being important additional factors in explaining economic development. Equally important were the synergies between some of these factors.

Competing ideologies about the advantages of particular economic theories and practices created a certain diversity of economic experience and may have played an important role in contributing to divergence in income per capita among nations, with Western democracies and their offshoots leaving the rest of the world far behind. However, globalization—alongside the pressures of international competition and technological change at the end of the Cold War, and the collapse of socialism as an alternative economic paradigm—have led to a narrowing of the options, a sense, as noted by Porter (2000, p. 26), that because “citizens are more exposed to successful behaviors elsewhere” geography, climate, and natural resources, are gradually giving way to knowledge, education and training, and the ability to access new technologies as the key drivers of productivity and, thus, economic growth and prosperity. In this new world, knowledge and technology are accessible and thus culture—in the sense used by Weber—becomes relatively less important. The unfolding of science and technology is either diminishing the relative importance of cultural factors in helping us understand different dimensions of the development process or, plausibly, we are witnessing the gradual emergence of an universal, global culture based on such values as respect for property rights, the rule of law, adherence to civil and human rights, acceptance of the beneficial role of market forces and signals as a mechanism for the allocation of resources, and so on. The challenge will be how to ensure the creative and peaceful coexistence of this global culture, with local values, beliefs and attitudes in a way that allows Japan to be Japan, at once a prosperous member of the global economy, but also true to its essential traditions and values.

9. Values for a progressive society

Economists and social scientists have identified certain values that characterize progressive societies and that help shape and influence patterns of development.³³ Time orientation, for instance, is one such value. Whether a particular culture is forward looking or unduly focused on the past is likely to make a big difference. It is rather more helpful to confront challenges by asking “how can we set this right?” than “who did this to us?” Toshimichi opted for the future; he thought that a better way to engage the creative energies of the Japanese people was through the acquisition of technological know-how and the emulation of best-practices from the developed world, rather than punitive military expeditions. That choice led to a century of rapid economic growth and convergence to rich country standards of living. The attitude towards work is crucial. Landes characterizes the invention of the mechanical clock as “the greatest achievement of medieval mechanical ingenuity,”³⁴ both for its revolutionary conception but, equally important, because it permitted the ordering of life in the cities in ways that had a major impact on productivity. “Indeed, the very notion of productivity is a by-product of the

³³ See, for instance, Harrison (2000).

³⁴ Landes, 1998, p. 49.

clock: once one can relate performance to uniform time units, work is never the same” (p. 49–50). It was the invention of the mechanical clock which in turn led to one of Adam Smith’s seminal insights: wealth and prosperity depend directly—to use Smith’s language—on the “productive powers of labor.”³⁵ So, work becomes an important organizing principle of life and productivity the engine of prosperity. A related value concerns whether societies operate in meritocratic systems where rewards are linked to performance and excellence, or whether advancement is the result of other factors—friendships, ethnic kinship, family connections, party affiliation. Productivity will be enhanced when resources are allocated on the basis of efficiency considerations rather than some criteria unrelated to performance. A recent paper by Bertrand and Schoar (2006) shows empirical evidence that countries “where family is generally regarded as more important have lower levels of per capita GDP, smaller firms, a higher fraction of self-employed, fewer publicly traded firms, and a smaller fraction of total market value controlled by families, on average.” (p.82).

What is a society’s relationship to the acquisition of knowledge and skills? Toshimichi understood that, to paraphrase Landes, “knowledge makes almost all the difference.” Education and training are emerging as key drivers of competitiveness. As the global economy has become more complex, it has become evident that in order to compete and maintain a presence in global markets, it is essential to boost the human capital endowments of the labor force, whose members must have access to new knowledge, be constantly trained in new processes and in the operation of the latest technologies. As coverage of primary education has expanded rapidly in the developing world, higher education has gained importance. Thus, countries which have invested heavily in creating a well-developed infrastructure for tertiary education have reaped enormous benefits in terms of growth. Education has been a particularly important driver in the development of the capacity for technological innovation, as the experience of Finland, Korea, Taiwan, and Israel clearly shows.³⁶ Lack of basic skills severely limits the possibilities of citizens to participate in the development process, to be gainfully employed, to be well informed judges of government policies and politicians, and to avoid falling prey to the manipulation of demagogues—as we have seen in recent years in various corners of the world. From a business perspective, as noted by Porter (1990), “the quality of human resources must be steadily rising if a nation’s economy is to upgrade. Not only does achieving higher productivity require more skilled managers and employees, but improving human resources in other nations sets a rising standard even to maintain current competitive positions.”³⁷

The radius of identification and trust in a society and, in particular, whether it is narrow or wide, is also likely to make a difference. If the primary identification within the community is with the family or the tribe, there may be problems in fruitfully engaging

³⁵ Smith, 1994, p. 5.

³⁶ On the role of education in the emergence of Israel as an ICT power see Lopez-Claros and Mia, 2006, “Israel: Factors in the Emergence of an ICT Powerhouse.” *Global Information Technology Report 2005–2006*. Hampshire: Palgrave Macmillan, 89–105.

³⁷ Porter, 1990, p. 628.

with the rest of the world. It is noteworthy that India's and China's fastest pace of economic growth over the past century coincided with an opening up of their economies to international trade, foreign investment, and the rigors of international competition. During the Ming dynasty in China the country turned inward, trade with the outside world collapsed and the economy came to a standstill, rapidly falling behind Europe, which, in contrast, had set a course of vigorous development, having "discovered" the New World with its resulting commercial advantages. India spent the first four decades after independence mired in poverty and lack of opportunity, largely isolated from the global economy.

The concept of trust and its role for economic and financial development has received increased attention in the recent literature. From the point of view of economic theory, trust can be seen as the probability that an individual assigns to a specific event (such as a business partner's compliance with the contract terms). Empirical evidence now abounds on the fact that an individual's level of trust in others is affected by cultural aspects such as religion or ethnic origin of her ancestors, although the impact of inherited culture on trust is attenuated for individuals with higher levels of education (Guiso, Sapienza, Zingales 2006). The European survey Eurobarometer contains questions about bilateral trust between individuals from different countries (for example, how much the Swedes trust other Swedes, or Germans, or Italians) and it has been shown that bilateral trust is affected not only by historical and linguistic features (such as the number of years a country pair has been at war between 1000 and 1970, or the commonality of linguistic roots), but even by the genetic distance between two populations.³⁸ The economic literature has further proved that people who trust more other people are also more likely to become entrepreneurs; and that the level of trust between two countries affects the level of trade, FDI and portfolio investment between the two countries (Guiso, Sapienza and Zingales 2009).

The ethical code and the moral values underpinning a society will, likewise, be fundamental. Sen (2009) reminds us that in *The Wealth of Nations*, Adam Smith "talked about the important role of broader values for the choice of behavior, as well as the importance of institutions." "But it was in his first book—he adds—*The Theory of Moral Sentiments*, published some 250 years ago, that he extensively investigated the powerful role of non-profit values. While stating that "prudence" was 'of all virtues that which is most helpful to the individual', Smith went on to argue that 'humanity, justice, generosity, and public spirit, are the qualities most useful to others.'"³⁹ Friedman (2005) argues that "economic growth not only relies upon moral impetus, it also has positive moral *consequences*" (p.18), as "the predominant tendency is for economic growth to render a society more inclined toward openness, tolerance, mobility, and democracy." (p. 101).

³⁸ Guiso, Sapienza and Zingales (2009) use a linguistic measure proposed by Fearon and Laitin (2003), and a measure of genetic distance developed by Cavalli-Sforza, Menozzi, and Piazza (1996).

³⁹ Sen, Amartya, "Adam Smith's market never stood alone", *Financial Times*, 11 March, 2009.

How does a society view gender and the role of women? There is a close connection between national economic performance and the degree to which societies have succeeded in integrating women into the economy and have allowed them to increasingly participate in decision making, particularly in the case of representation in parliaments, cabinets and other executive bodies, and have made it possible for them to avail herself of opportunities for education and the building up of her human capital.

Within the limits allowed by availability of data of this nature, the economic literature has shown that women's participation in economic activities is affected by culture: for example, cultural heritage affects living arrangements (Giuliano 2007), and women's labor force participation and fertility rates are affected by those prevailing in the country of origin of their ancestors (Fernandez, Fogli and Olivetti 2004; Fernandez and Fogli 2009). The World Bank's *Women, Business and the Law* data and report, on the other hand, show the close connection between the law and restrictions embedded in the law imposing various limitations on women's agency in 143 countries and labor force participation, ownership of firms and access to the financial system.

International competitiveness and productivity have much to do with the efficient allocation of resources, including, of course, human resources. The efficient operation of our increasingly knowledge-based economy is not only a function of adequate levels of available finance, a reasonably open trade regime for goods and services, but, more and more, is also dependent on our ability to tap into a society's reservoir of talents and skills.

When, because of tradition, a misunderstanding of the purpose of religion, social taboos or plain prejudices, half of the world's population is prevented from making its contribution to the life of a nation, the economy will suffer. The skills which the private sector can tap will be necessarily narrower and shallower and productivity, the engine of sustainable growth, will be impaired. It is, indeed, no surprise that the most competitive countries in the world, those that have better been able to operate on the boundaries of the technology frontier, are also those where women have been given the greatest opportunities to be equal partners with men.⁴⁰ The authors' own experience suggests that, for instance, when corporate boards or other groups of people appointed to formulate policies, design programs or undertake some other specific task are all male-dominated, the decisions arrived at will tend to be suboptimal. They will inevitably reflect the priorities and biases of men, who have a particular way of looking at the world and analyzing its problems. However, when the group is diverse, the consultation that precedes the decisions will have benefited from the distinct insights of women, who bring to the discussion a different, sometimes complementary, set of perspectives. To the extent that gender diversity contributes to better decision-making, the company will benefit and one will see it grow and evolve in more imaginative ways. Thus, gender equality does not

⁴⁰ The relationship between an economy's level of development and women's labor market participation is however not a linear one: Mammen and Paxson (2000) use cross-country data from 1970 to 1985 to show that the percentage of women in the labor force first decreases and then increases as the GDP per capita increases,

have a purely ethical or moral dimension, but is, in fact, an issue of economic efficiency and, thus, fundamental to the creation of a more prosperous world.

Traditions and social norms can affect a socio-demographic group's "capacity to aspire" (Appadurai 2004; Woolcock 2014) and ultimately to contribute to the economy: this is not only true for women, but also for minority groups. Several studies have shown that these groups' performance in standardized tests gets worse when researchers reveal to participants that the test is targeted to minority groups, or when participants are asked to disclose their belonging to a minority group (Steele and Aronson 1995; Hoff and Pandey 2006).

The above list is far from comprehensive and the discussion here of individual items has been brief—some of these issues are important and further discussion is taken up elsewhere. Furthermore, the above list does not reflect any particular cultural bias; it is not linked to a particular set of values, Western or otherwise, or to a particular religious or cultural tradition. In saying that education and the acquisition of knowledge and skills are desirable development objectives we are making a statement that holds true across different regions of the world, that applies to all contemporary civilizations, that is as valid in northern China, as it is in Siberia, in central London, or in the Bolivian Andes; it is also a statement the validity of which the progress of science and technology is only likely to make truer in years to come. In a fundamental way, this is one of the most direct consequences of globalization, the gradual emergence of a commonly shared language to understand some key foundations for economic development. Of course, societies will differ in the ways and the extent to which they have internalized some of these values in their policies, their traditions and their institutions. Acceptance of the desirability of gender equality, for instance, as a critical element of a progressive development strategy does not mean that inequalities and injustices based on gender—deeply entrenched in all our cultures, to a greater or lesser extent—will suddenly disappear. But few would disagree with the thesis that gender disparities are out of step with modernity and that their presence retards human progress. Development is not only about reducing poverty and expanding opportunities against the background of rising incomes. It is also in a very fundamental way about adopting a set of values that are compatible with humanity's moral development.

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