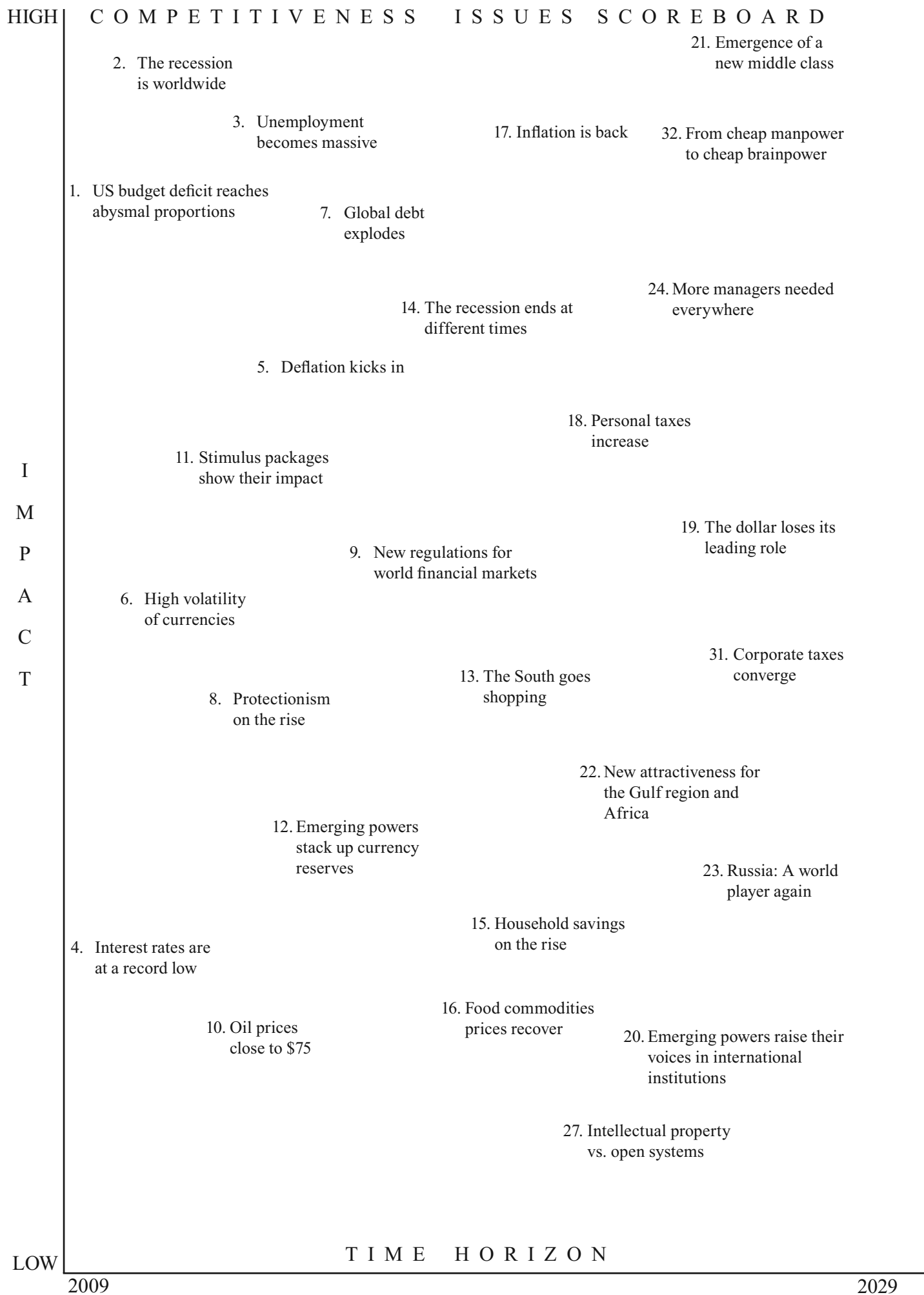


THE COMPETITIVENESS ROADMAP: 2009 - 2050

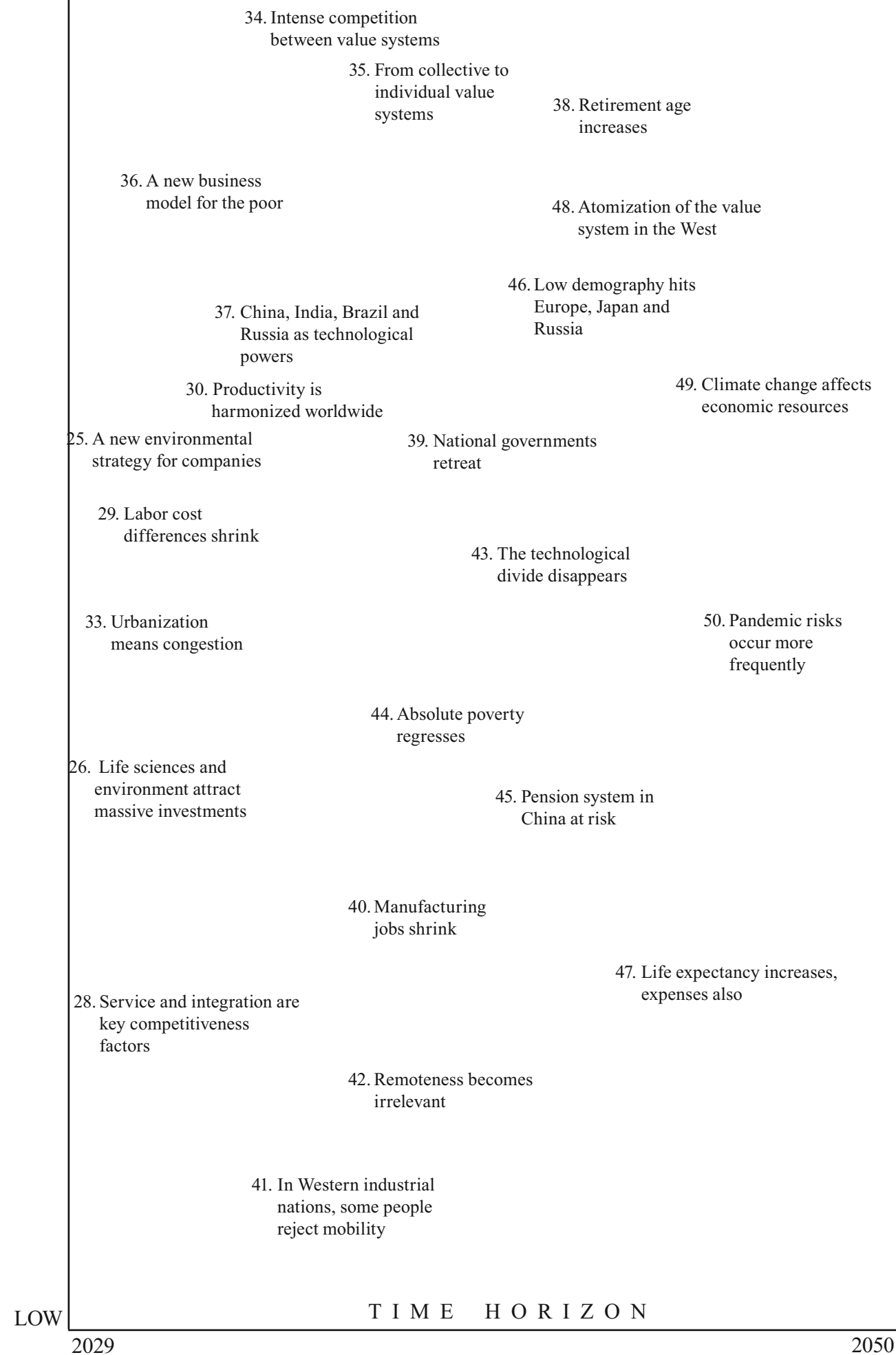
by Professor Stéphane Garelli

The “Competitiveness Roadmap” is an attempt to describe and assess the main issues that will affect the world competitiveness landscape over the next four decades. Issues are shown along two axes - degree of impact and timescale - to provide a clear “mental map” of the environment in which nations and companies will operate.

This is a subjective assessment which aims to bring some coherence to the multitude of issues that are said to be having an impact – sooner or later – on the competitiveness landscape. These issues are succinctly described on the fold-out pages.



HIGH C O M P E T I T I V E N E S S I S S U E S S C O R E B O A R D



- 1. US budget deficit reaches abysmal proportions** - The US budget deficit in 2009 is expected to attain a staggering \$1750bn. This represents a deterioration of some \$2000bn since President Clinton left the White House 10 years ago and posted a surplus of \$236bn.
- 2. The recession is worldwide** – The OECD countries expect a contraction of their economies by 4.3% in 2009. Such a deep recession also affects the emerging economies: the past decade of growth was not sufficient to create a large buffer of internal demand to compensate for the drop in exports.
- 3. Unemployment becomes massive** – 25 million people lose their jobs in the OECD region and the average jobless rate hits 10%. Globally, the International Labor Organization articulates a figure of 50 million additional unemployed.
- 4. Interest rates are at a record low** - While in the US rates approach zero, the rest of the world also experiences their lowest rates in decades. Deflation is feared, forcing central banks to introduce new policies such as quantitative easing.
- 5. Deflation kicks in** – With recession, the general level of prices falls below zero in some industries such as automobiles, consumer electronics, food, real estate, etc. In a deflationary environment, consumers delay their purchases in the hope of a better price later.
- 6. High volatility of currencies** – The currency markets experience considerable volatility. The dollar remains more unstable than the Euro. The latter, however, has been weakened by its exposure to the difficulties of Central European economies. Denmark, Sweden, the Baltic States and maybe Iceland consider joining the Euro... The Pound continues to decline.
- 7. Global debt explodes** - The US national debt now surpasses \$11.2 trillion and increases by \$3.7bn a day! Budget deficits in most advanced nations are going to exceed 5% of the GDP. In 2009, the borrowing requirements of the US will be \$2500bn and \$1000bn for Europe. Central Europe is said to have some \$1300bn of debt towards foreign banks. Who is going to pay for this debt? For the first time, governments worry that some bond issues may not be subscribed.
- 8. Protectionism on the rise** - In industrial nations, public opinion and governments are increasingly sensitive to the loss of economic power to emerging nations and the destruction of jobs at home. Possible protectionist measures focus on “buy national” incentives, environmental protection, corporate governance, social protection and intellectual property.
- 9. New regulations for world financial markets** - A fundamental overhaul of the regulatory environment takes place with the objective of laying down new rules for the supervision of financial activities and to consolidate competences among various institutions. Globally, the Basel Committee on Banking Supervision and the Financial Stability Forum are responsible for defining new standards and practices. Implementation remains at a national level.
- 10. Oil prices close to \$75** - The recession has forced oil prices to retreat from \$147 a barrel in July 2007 to \$42 six month later. The objective of oil-producing nations is to manage a return to an oil price of \$75 a barrel. New production fields such as tar sands, deep sea, or in the Arctic, only become profitable at that level. When the world economy recovers, prices will experience the same upward volatility as demand in emerging economies (especially China and India) will reach the consumption requirements of industrialized nations.
- 11. Stimulus packages show their impact** – Some \$5000bn have been injected by governments in the world economy. They have also played their role as lenders of last resort, to avoid bankruptcies. Central banks flood the market with money. Confidence is restored, demand picks up again.
- 12. Emerging powers stack up currency reserves** - Emerging powers are accumulating foreign currency reserves at impressive rates: Number one is China with \$2005bn, followed by Japan \$1031bn, Russia \$435bn, Taiwan \$292bn, India \$254bn, Brazil \$208bn and Korea \$201bn. As a consequence, money is not necessarily flowing back to the US or Europe, as in the past.
- 13. The South goes shopping** – Sovereign funds become major players in world finance and acquire more industrial companies from the West. They also become a major source of financing for infrastructure projects and for the development of local companies in their own countries. Global brands from China, India, the Gulf region and Russia hit international markets – it is not a cozy world anymore!
- 14. The recession ends at different times** - Recessions come in four shapes: V- a steep but short slowdown, W - or so called double-dip, U - a longer weakening of the economy and L - a prolonged decline. The US expects a U, Europe fears an L, just as Japan, China and the emerging economies count on a V.
- 15. Household savings on the rise** - For the first time in decades, households are more cautious about their spending and re-connect to the notion of “saving for rainy days”. In industrialized nations, the willingness to spend more is targeted to technological innovation, clean-tech or inelastic expenditure such as food, health or wellness. In emerging economies, the attitude toward spending is more moderate and dependent on increased purchasing power.
- 16. Food commodities prices recover** – Food commodities have seen their prices fall by 50% since the beginning of the recession. However, an emerging middle class is changing its eating habits and greater demand will push prices up again. For example, China is moving away from a rice-only diet. In a decade it has increased its milk consumption seven-fold, poultry by 60%, beef by 30% and wheat by 25%.
- 17. Inflation is back** – The excess in money supply as well as the recovery of the economy triggers an inflationary spiral. Revived consumption also boosts raw material and commodity prices. Central banks are slow to react since inflation is favorable in an environment of debt. This is the re-birth of the “controlled inflation” approach.
- 18. Personal taxes increase** – With the end of the recession, personal taxes increase to help governments rebalance their budget deficits. Higher incomes are particularly targeted since their credibility has been damaged by excessive bonuses, “golden parachutes” and disproportionate salaries. Tax havens are severely curtailed.
- 19. The dollar loses its leading role** – More than 60% of the world currency reserves are in dollars and 32% are in Euros (the pound and the yen remain negligible). However emerging economies increasingly worry about their dependency on the dollar and the policy of the Fed. Rather than switching to another currency, several governments investigate the possibility of turning to a basket of currencies for their reserves or even for pricing their exports (especially natural resources).
- 20. Emerging powers raise their voices in international institutions** - Emerging powers significantly increase pressure to gain access to decision-making in international institutions by emphasizing their predominant economic weight and their financial capabilities to fund such institutions.
- 21. Emergence of a new middle class** - The emergence of a middle class in Asia, Central Europe and Latin America changes the nature of the world economy. Defined as a population living on \$2 to \$13 a day, the middle class has exploded from 1428 million in 1990 to 2644 million in 2005. In India, 50 million people are middle class today: there will be 580 million in 2025.
- 22. New attractiveness for the Gulf region and Africa** - There are \$800bn of infrastructure projects under completion in the Gulf region while Africa is becoming attractive again thanks to energy and commodity investments. More than 800 Chinese companies operate in Africa. The population of Africa will reach 1.9bn in 2050!
- 23. Russia: A world player again** - Russia regains its status as a world player. This Russian comeback thrives on oil, gas and commodity prices to re-establish a stronger international presence. Russia addresses its infrastructure problems and the rule of law for a more stable business environment. Politics and economics remain totally interwoven in this new approach to power.
- 24. More managers needed everywhere** - More managers are required in emerging powers. India, China, Russia, Brazil and the Gulf region increasingly focus on management and the creation of business schools, beyond science and engineering education. Strategy, finance and marketing skills are now priorities for ensuring the continuous expansion of local enterprises in a global environment.
- 25. A new environmental strategy for companies** - Climate change is clearly a priority for public opinion. Governments and companies enhance their visibility on environmental issues and integrate an environmental dimension into their strategy. Companies that fail to do so will not attract the best talents in the younger generation, who are very sensitive to this issue.
- 26. Life sciences and environment attract massive investments** - Life sciences, as the population becomes older (40,000 centenarians in Britain in 2030), and environmental technology, as the world becomes hotter (+ 0.6°C in 20 years), will attract massive investments. Innovation proliferates

in these two areas of knowledge. Wellness (in addition to curing existing diseases) becomes a priority for ageing populations.

27. Intellectual property vs. open systems - The intellectual property debate opposes two conceptions of world business: on the one hand the respect for innovation and invention and on the other hand the thrust for a more open and collaborative society where information is widely shared. Social network systems flourish and challenge government-controlled information in some parts of the world.

28. Service and integration are key competitiveness factors - Service competitiveness (banking, financial transactions, customer relationships, brand management, etc.) remains one core of the competitiveness of Europe and the US. The ability to integrate and manage a global business model is another.

29. Labor cost differences shrink - The difference in labor costs around the world is drastically reduced as nations develop. A range from 1 to 20 today is reduced to 1 to 5 as purchasing power around the world converges.

30. Productivity is harmonized worldwide - Productivity is harmonized around world operations as companies become truly global and widely diffuse the same technology and processes throughout the markets where their assets are located. The value chain is managed at the global level. The nationality of companies matters less and less.

31. Corporate taxes converge - Nations, which have competed fiercely in lowering their tax rates to attract enterprises, are developing an international consensus that establishes common and agreed-upon practices for the taxation of companies, no matter where they operate. The bandwidth of corporate tax rates is significantly reduced.

32. From cheap manpower to cheap brainpower - The world moves from a competitiveness model based on cheap manpower to one based on cheap brainpower. In total, India, China and Russia “produce” 14 million university students each year, as many as the US. These students quickly become young professionals eager for success, who are relatively affordable and highly motivated. Through technology, these brains can be accessed from all over the world.

33. Urbanization means congestion - The urbanization of the world economy increases pressure on economic and social infrastructure (roads, water, hospitals, etc.), the environment and also increases social problems (rural migration to cities). Between 1900 and 2000, the world population living in cities exploded from 150 million to 2.9 billion! As a consequence, congestion becomes a major issue in several large cities.

34. Intense competition between value systems - The competition between value systems is exacerbated by the success of emerging powers. In Asia and Central Europe a “work hard, get rich” attitude competes with a “work-life balance” attitude in industrialized nations.

35. From collective to individual value systems - The value system of society in Asia gradually evolves from one based on collective values (such as hard work and national pride) to one based on individual values (such as work-life balance), much closer to the US and European value systems.

36. A new business model for the poor - A new business model emerges for the very poor of the world (such as in Africa or the Indian subcontinent). Products are manufactured and sold at a fraction of the price charged elsewhere, and with minimal functionalities. Examples: the \$10 phone, \$100 PC or \$2500 motor vehicle (e.g. Tata in India) and of course micro-credit.

37. China, India, Brazil and Russia as technological powers - China, India and Russia regain their age-old status as technological powers. Foreign companies no longer hesitate to transfer research centers to these countries that have a long tradition of excellence in science and innovation.

38. Retirement age increases - The pension systems in Europe and Japan are increasingly at risk. One-third of the population is now over 60 years old; 10% is older than 80! Retirement gets closer to 70 and fluctuates depending on the industry sector and the hardship of work. Some white-collar pension systems now have to deal with an increasing number of centenarians. The financial crisis has reduced accumulated wealth and employees are forced to retire later.

39. National governments retreat - National governments, which regained more power during the recession, are transferring much of their

economic power to regional institutions (such as the EU) or multilateral ones (such as the UN, WTO, the IMF, the BIS, etc.). Key economic decisions are now taken at a global level but implemented nationally.

40. Manufacturing jobs shrink - During the past decade, world production of manufactured goods has grown by some 50% while manufacturing jobs have declined by 10%. This trend is also evident in emerging industrial powers such as China. Higher productivity worldwide – in part due to the internationalization of technology and manufacturing processes – is the explanation.

41. In Western industrial nations, some people reject mobility - Although communications and travel are more pervasive, a part of the population rejects excessive mobility and rediscovers the attractiveness of a local environment. Younger professionals reject promotions or re-location of responsibilities when they are too disruptive to their private lives. Congestion in cities, airports and most transportation systems takes away the attractiveness of mobility.

42. Remoteness becomes irrelevant - The disappearance of most trade and investment barriers, the efficiency of the international logistics system (roads, shipping, trains and air freight) and the pervasiveness of communications technology give every single nation and enterprise instant access to world markets and unlimited opportunities.

43. The technological divide disappears - The technological divide disappears because of the development of a worldwide communications infrastructure and the proliferation of cheap technological products for the poor.

44. Absolute poverty regresses - The level of absolute poverty (\$1 a day at 1996 prices) is being drastically reduced. It already decreased from 15.4% to 5.7% of the world population between 1970 and 2006. However, income inequalities among the world population increase. The richest become even richer. Social tensions do not disappear.

45. Pension system in China at risk - The pension system in China is in jeopardy. The transition from a Confucian society where children took care of their parents in their home during their old age to a society where elderly people retire in a social and health system of their own costs money. However, the pension scheme may not have been properly funded over time. Compulsory savings (deducted from wages as in Singapore) could be the answer, or diverting part of the sovereign wealth fund to finance national pension schemes, such as in Russia.

46. Low demography hits Europe, Japan and Russia - The low demography in Europe, Japan and Russia takes its toll on the dynamism of the economy. In 2050, Europe will count 628 million people, having shrunk by more than 100 million in 50 years. Could more lenient immigration policies compensate for this decline, especially for skilled labor?

47. Life expectancy increases, expenses also - Life expectancy increases dramatically to well over 85 years old in many industrialized nations. The burden on the health system becomes greater, also due to the early systematic screening of the population for illnesses.

48. Atomization of the value system in the West - The value system in Western societies becomes “atomized”. A common purpose in the population is replaced by a multilayer society where many different value systems cohabit, each of them appealing to a specific part of the population.

49. Climate change affects economic resources - Climate change forces the re-allocation of economic resources. Food and water become scarcer in some regions, while new crops become available in more northerly regions. The prices of basic commodities are totally altered. The “environment cost” becomes part of the economic scenario, and is thus included in statistics such as the GDP.

50. Pandemic risks occur more frequently - As the world becomes more open, transport more pervasive and logistics more efficient, epidemics spill more easily from one continent to another. Pandemics are permanently monitored by international organizations, and companies tighten up their health and safety procedures.