When this book went to press in its original English version, it was 2002. The USA was in recession after the collapse of the Internet bubble and the shock of 9/11. Uncertainty reigned in the world economy, although there was a clear intensification of the globalization of production. In my epilogue then, I wondered whether what lay ahead would be “a depression, a gilded age or a true golden age” and whether in the stock markets “the reconnection between paper and real values still await[ed] a jolt or two”.

At that point I still thought it was possible for the core countries to regulate finance and bring about the Golden Age that tends to follow each major technology bubble collapse. But what came instead was a policy of low interest rates and high liquidity that restored the financial system to its casino mode, by extending the frenzy into additional markets, notably real estate and financial derivatives. In other words, in this particular surge we saw a double bubble, one based on technological innovation, the other on the financial “innovations” facilitated by those technologies.1

We are once again at the crossroads. After this second bubble collapse, each country – and the world – must decide whether to let the financial casino continue unfettered, or create the conditions for a flourishing production economy with growing employment and wellbeing for the many. The Information and Communications Technologies (ICT) and their paradigm are sufficiently installed in the minds and in the territories so as to bring about a golden age of real growth. With the appropriate institutional recomposition, it would now be possible to innovate across all industries and services and meet the challenges of environmental sustainability as well as to enable the spread of benefits across the whole of society.

Historically, such turnarounds have been achieved by a combination of pressures – the indignation of investors losing all their savings in the stock market and discovering the amount of fraud and wrongdoing that went on behind the scenes; the frustration of those needing loans to save their businesses; the desperation of those who lost their pensions, their savings or their home and the anger of the unemployed. It is these forces, in different proportions depending on the period, which have pushed the politicians to redress the balance and intervene to favor the real economy, the production economy, and the weaker segments of the population.

Yet now finance is even more powerful than in previous surges and it has deeply penetrated the political and business elites. Many authors have written about the “financialization” of the economy2 with different meanings and emphases, including the great increase in the relative weight of the financial sector in the economy and its global character. Indeed, it is the latter that

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1 This is argued in Perez (2009)
2 Krippner (2005)
makes it more difficult to establish proper regulation in order to hand control of investment over to production capital. Globalized finance cannot be properly controlled nationally; it requires supranational regulation with enforcement power. In today’s world, agreement on such institutions seems far from possible.

The situation does indeed bring to mind Hilferding’s⁴ argument about finance capital having taken over in the Belle Époque or what was the gilded age of the third great surge. That period, with its international investments and its supranational cartels, could be seen as the first globalization. But one must not forget that after that period, during the deployment of the 4th surge from the late 1940s to the early 1970s, finance became strictly regulated in the West and represented a small proportion of the economy compared with production.⁵ These sorts of pendular swings characterize capitalism, and have been at the heart of the discussion in this book.

The theoretical legacy of Nikolai Kondratiev, the Russian economist who in the 1920s identified the long swings in capitalist growth, is one of the key sources of this book. Technical change was among the contributing factors mentioned by Kondratiev when trying to understand such long term cyclical behavior, and he clearly stated that he thought long waves were “inherent in the essence of the capitalistic economy”;⁶ his work in turn strongly influenced Schumpeter.⁷ The notion that we present in this book – that of great surges of development encompassing the economy, technology and institutions – was developed by moving away from looking at aggregate growth statistics, and instead concentrating attention on the way technological revolutions emerge and are assimilated by the economy and society at large. Nevertheless, the book preserves the fundamental notion brought forward by Kondratiev: that capitalism is cyclical by nature and that by examining historical recurrence one can gain important insights into its workings.

For the Russian-speaking public, there are elements of this work that may be of particular interest in the interpretation of past events. The decline of the Soviet system, for instance, can be seen as being brought about, among other factors, by the lack of mechanisms for generating and propagating a technological revolution and rejuvenating the production structure. The mass production revolution initiated with Ford’s Model-T in 1908 underlay both the free market and the Soviet system and drove economic developments from the 1910s to the end of the 1960s. It was the power of the assembly line in fabrication, of Taylorism in work organization and of economies of scale for mass production that allowed growth and productivity increases in both types of economies. In both, the principle of homogeneity was prevalent; as Henry Ford himself said, “you can have any color, as long as it’s black”. This identical-products paradigm gave birth, in one case, to the so-called “American Way of Life” around suburban living, the automobile, electricity, television and the refrigerator; in the other, to a standardized model of consumption defined by central planning.. The Cold War defined the other growth industry of both systems: mass production of military equipment. All this was possible both with a market-centered and a planning-centered model, but the new globalized and flexible production model of the information and communications technologies (ICT) requires a more complex, flatter, decentralized structure open to creativity at the bottom. Any attempt at understanding the progressive deterioration of the Soviet system will not be complete without taking into account the maturation and decline of the technological revolution that underlay its growth process.

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³ Hilferding (1981)
⁴ By 1931, Hilferding himself had abandoned the idea of finance capital as the “final” stage of capitalism and spoke of it as a precondition for the establishment of “organized capitalism” (Bottomore in the 1981 English edition of Hilferding 1910)
⁵ Kondratiev (1925:1979) (please include the reference to the Russian Edition here)
⁶ Schumpeter (1939:1982)
There were of course some attempts at transformation from inside the system. The thought leaders of the Czech reform movement in the late 1960s, for example, already understood that a technological revolution was brewing with the advent of the computer.\(^7\) Their proposals involved transferring power from the bureaucracy to the intelligentsia and allowing creativity to flourish in a more decentralized way, though it is not clear whether the changes they suggested could have in fact created the necessary sort of technological dynamism.

Another issue of particular interest for the audience of this translation is understanding the specific way in which the shift to capitalism occurred in the 1990s. These were the times of the frenzy phase of the ICT surge, a time when financial capital was running loose, billionaires were being made through casino-style speculation and the general atmosphere was one of permissiveness, corruption, callousness towards the poor and the weak and celebration of success, by whatever means it was attained. Markets were supposed to be perfect and all should be left to their designs. This was indeed a conditioning context for the “wild” capitalism that took over Russia and much of Central and Eastern Europe at the time, and that has become synonymous with capitalism itself for large segments of the populations involved and affected.

If the great surges model proposed here can be useful with hindsight to enrich the explanations of events in the past, the question is whether foresight would also be possible. As argued in chapter 15, while the model does not allow for precise predictions, it can indeed serve to identify the range of the viable. All that technology can do is set the stage for the social actors to decide their path. Just as the mass production revolution allowed the setting up of very different systems – the Keynesian democracies, the socialist countries, Nazi-fascism, and a variety of Developmental States in the Third World – the ICT revolution provides a similarly wide spectrum of possibilities, perhaps made even wider by the process of globalization, the challenge to the “Western” vision of civilization and the environmental threats.

As this is being written, the major crisis that followed the financial collapse of 2008 is still unfolding. The faith in free markets has been shattered, the role of the State is being reconsidered and Keynesian policies are being revived and tried. The huge bailouts staged by most governments and the enormous amounts of liquidity facilitated by the Central Banks have performed a quasi-miracle in saving the financial system, but the “real” economies of most countries are riddled with heavy debt burdens, high unemployment and stagnation.

Attempts at the needed financial regulation are being resisted, and indeed made more difficult by the apparent return to normality in the financial sphere. Are we on our way to a third bubble? Will the deployment period of the ICT surge be a gilded rather than a golden age? Will some sort of supranational set of institutions be established to oversee finance and other globalized activities? These are only a few of the many questions that cannot be answered on the basis of historical regularities alone. The interpretation of history presented here is of necessity just a partial tool, but it can serve as a dynamic backdrop for asking relevant questions, and as criteria for mapping alternative paths of action. The final historical outcomes will be shaped, within the realm of the possible outlined by the potential of the ICT paradigm, by the socio-political forces of today and tomorrow. It is my hope that the Russian-speaking readers will consider this interpretation useful and that Russian researchers will find it challenging and stimulating.

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\(^7\) Richta el al. (1966:1969) Civilization at the Crossroads
New References (to be added to the general bibliography)


Kondratiev, N (the English version I used is cited in the book but please add to the bibliography the Russian edition of his work)

