Why the State Has to Come Back into an Active Role in the Economy

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Historically capitalism has had a pendular behavior in assimilating technological revolutions. In the first two or three decades of diffusion it unleashes the free markets led by the bankers and financiers. This leads to a major bubble which then collapses creating a recessive situation. But by then the new technologies, their organizational paradigm and their new infrastructure have been fully installed and can be used for widespread growth through modernization and innovation across all industries. This has usually required State intervention to regulate finance, provide incentives to production and innovation and create positive conditions for investment in the real economy (instead of in the financial casino that created the bubble). The major golden ages in the second period of each technological revolution have been aided by such interventions.1

Globalization and the role of governments

Globalization is not about eliminating the national states but about the global distribution of production. The role of the state in that context is greater than ever because it has to create conditions to attract certain industries and activities and to discourage others, while improving the conditions for the great majorities of its population.

To arrive at a consensus strategy in any country, it is important to have a shared vision of what the country can do successfully in order to have all the agents converge in those directions. Industrial policy is back! The August 7th issue of The Economist laments the fact but does acknowledge it is happening widely and cannot avoid recognizing that such policies have had some successes. Each country needs to both solve the demand problem and to decide in what direction to provide incentives for innovation. In particular the developed countries have been losing employment to the emerging economies and, in order to maintain the levels of well being of their populations, they must urgently find adequate directions for respecializing.

Deciding on a general direction for innovation

Isolated innovations, no matter how successful, do not bring economic growth. They need to be embedded in networks of production and systems of innovation and often to be strongly rooted in some pre-existing advantage.

A country with a potentially huge domestic market can use it for employment and growth and to consolidate the habit of continuous improvement, while it further develops its advanced export markets. Employment and decent salaries are the solid grounding of a healthy growth process. Without a well diversified production structure, isolated innovations will not be competitive and will ultimately be absorbed by foreign companies. This has happened to many science-based innovations in England and other countries.

A country with massive natural resources can build on that to innovate in the processing industries and improve its export mix. The more connected that the innovations are to existing industries that are strong and growing, the more likely it is that they will be successful in the longer term and that they will contribute to economic growth and further innovation.

In particular, the development of networks of business services and high-tech engineering around those industries (for example for the various stages of production and processing of oil and gas) can be a source of collaborative innovation. Not only are these services strongly knowledge based, they are also not part of WTO agreements, so that a country has much more freedom in developing these with strong links to the local user industries.

In addition, very large countries have different regional characteristics, resource endowments and specialized skills and experience. This could favour decentralized and multiple patterns of relative specializations providing conditions for dynamic domestic trade among regions. That too could eventually serve as training ground for an eventual export drive.

Radical innovations for the future

The next technological revolution is likely to be some combination of biotechnology, bioelectronics, nanotechnology and new materials, but advances in these technologies will still be expensive and are more likely to be fruitful if they are strongly connected to industries that are flourishing or to emerging demand sectors. Making nano-materials for batteries or using biotechnology to develop bacteria to digest oil spills is more likely to lead to a profitable business than stand-alone products without a powerful target market. When semiconductors were first developed, they were used for military purposes and to make mass produced radios and record players portable. Computers were seen as a big piece of capital equipment for governments or huge companies. It is only when the microprocessor breakthrough is made that the information revolution begins. And even then, it takes a decade before personal computers start really changing production and consumption patterns and another decade before the Internet creates the optimal conditions for globalization. It is very wise of every country to prepare for the next revolution, even knowing that it is not possible to guess in which direction the major breakthroughs will occur. It is a gamble but a necessary one. But those technologies are not likely to represent a significant portion of GDP for a long while.

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Widespread innovation for the short and medium term

In the meantime, the information revolution is there with all its advantages and low cost. It is capable of modernizing and transforming every other industry and helping economic growth. There are many innovations to be made across the board in whatever industry one is engaged in. An obvious direction has to do with the environment, but depending on the country, innovations to cater for old age or to face extreme climates or in the creative industries or connected to the natural resource endowment can also be encouraged.

It occurs to me that Russia has a wide innovation space in facing its specific challenges: distance, climate, etc. I suspect you may need rather specific materials for construction that are durable in harsh climates or special transportation systems. Those are the sorts of innovations that benefit from the domestic market in the early testing period and can open specialized markets for export once they are fully proven and cost-effective.

The main thing to understand is that, whatever you produce —if it is done in a modern way in terms of organization— can be profitable and yield growth for the economy. Learning organizations, interaction in systems, continuous improvement, innovative business models and networks of collaboration between companies can revitalize, rejuvenate and modernize all industries, including the most traditional. And in a country with a massive population such a process of reviving production networks can generate a powerful positive feedback, reviving domestic demand and improving the general standards of living of the majorities.

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