Financial Markets, financialization of corporations and technological innovation

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• Innovation????
• Financialization????

• What are they????
Innovation as a consensus:
the analogy of Paris’ Place Charles de Gaulle

If concepts had urban analogies the innovation one could be likened to one of these star-shaped squares, like the Charles de Gaulle in Paris, where avenues coming from different places join and then continue their journey towards divergent destinations (Erber, 2009)
Financialization?

• the ascendancy of ‘shareholder value’ as a mode of corporate governance (O’Sullivan and Lazonick, 2000)
• the explosion of financial trading with a myriad of new financial instruments
• the huge political and economic power of the financial elite or oligarchy (Palley, 2007)
• the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies (Epstein, 2007)
• a pattern of accumulation in which profit making occurs increasingly through financial channels rather than through trade and commodity production (Epstein, 2007)
Financialization: Chesnais - a critique to Epstein

• “Wealth" (value and surplus in the Marxist terminology) can only be created through the production and successful commercialization of goods and services

• When financial investors – banks and investment funds – succeed in building a hold on economic activity, a very large part of this wealth is channeled to financial markets in the form of interest on loans to governments, firms and households and of dividend

• This appears in the balance sheets of financial corporations as profits. But these are fictitious profits

• Financial markets do not create value and surplus, but only organize an unceasing series of risk shifting and redistributing operations
Financialization: Chesnais, 2003 and 2016

- An economic and political configuration (an epoch)
  - in which the extremely high centralization and concentration both of money capital and industrial capital (and a dense intermeshing between the two), have placed accumulation and extended reproduction under the sway of the organizations that embody what Marx names interest-bearing capital
  - This is capital in the form of stock and bonds
    - e.g. fictitious capital from the point of view of real investment
Such configuration

1. Is conducive to extremely high degrees of income and wealth distribution (the gap between the 1% and the 99%).

2. Is founded on three pillars:
   - the servicing of government debt (and to a lesser degree now of household debt) and so of wealth channeled directly to banks and funds;
   - an ever more diversified range of methods of predatory surplus appropriation developed by TNCs for the benefit of their shareholders
   - the unabated exploitation of the Planet’s non-renewable resources by mining and agro-industrial corporations, whatever the consequences.
1. Debt (Government and Others)

Global stock of debt outstanding, $ trillion, constant 2013 exchange rates

<table>
<thead>
<tr>
<th></th>
<th>Q4 2000</th>
<th>Q4 2007</th>
<th>Q2 2014</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>142</td>
<td>199</td>
</tr>
<tr>
<td>Household</td>
<td>19</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>Corporate</td>
<td>26</td>
<td>22</td>
<td>56</td>
</tr>
<tr>
<td>Government</td>
<td>20</td>
<td>22</td>
<td>58</td>
</tr>
<tr>
<td>Financial</td>
<td>20</td>
<td>20</td>
<td>45</td>
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$57 trillion increase

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<thead>
<tr>
<th></th>
<th>2000–07</th>
<th>2007–14</th>
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<tbody>
<tr>
<td>Total</td>
<td>7.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Household</td>
<td>8.5</td>
<td>2.8</td>
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<tr>
<td>Corporate</td>
<td>5.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Government</td>
<td>5.8</td>
<td>9.3</td>
</tr>
<tr>
<td>Financial</td>
<td>9.4</td>
<td>2.9</td>
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</tbody>
</table>

246% 269% 286% Total debt as a share of GDP

1 Figures do not sum to total, because of rounding.
2Q2 2014 data for advanced economies and China; Q4 2013 data for other developing countries.

Source: Bank for International Settlements; Haver Analytics; International Monetary Fund *World Economic Outlook*; national sources; McKinsey Global Institute analysis.
Financialization and Government

• “We had to struggle with the old enemies of peace — business and financial monopoly, speculation, reckless banking, class antagonism, sectionalism, war profiteering. They had begun to consider the Government of the United States as a mere appendage to their own affairs. We know now that Government by organized money is just as dangerous as Government by organized mob.”

FD Roosevelt (1936)
Brazil 2016-2017

“Government by organized money is just as dangerous as Government by organized mob.”

Where will unemployment rise next year?

Enter country names to find out

![Unemployment Rate Graph](Highcharts.com)
Brazil 2016-2017

“Government by organized money is just as dangerous as Government by organized mob.”
2: Financialization of Corporations

• The diversification and intensification of predatory surplus appropriation by TNCs led the 2011 edition of the UNCTAD annual report to focus on what it names "non-equity modes of international production”

• TNCs coordinate activities in their global value chains (GVCs) and influence the management of host-country firms without owning an equity stake in those firms:
  – contract manufacturing,
  – services outsourcing,
  – contract farming,
  – franchising,
  – licensing,
  – management contracts
  – other types of contractual relationships
Impact on innovation
a) faltering innovation and the hypothesis of a technological plateau

• Robert Gordon challenges Solow’s work in the 1950s on growth as continuous process that could persist forever (Gordon 2012)
  • The IT-based industrial revolution “began around 1960 and reached its climax in the dot.com era of the late 1990s, but its main impact on productivity has withered away in the past eight years. Many of the inventions that replaced tedious and repetitive clerical labor by computers happened in the 1970s and 1980s. Invention, since 2000, has centered on entertainment and communication devices that are smaller, smarter and more capable, but do not fundamentally change labor productivity or the standard of living in the way that electric light, motor cars, or indoor plumbing changed it (2012, p. 2)
• in sharp contrast with the expectations of a new Great Technological Surge based on IT as defended by Perez (2007) or Archibugi (2016)
Impact on innovation

a) faltering innovation and the hypothesis of a technological plateau

• Cowen (2011) considers that while the Internet has been fantastic for the intellectually curious, its direct employment effects are very weak and it has done little to raise material standards of living.

• Accordingly, we have a collective historical memory that technological progress brings a big and predictable stream of revenue growth across most of the economy, but, when it comes to the Web, those assumptions are turning out to be wrong or misleading

• Cowen uses the expression "technological plateau" and points to the "low-hanging fruit” which made rapid growth easy, including the cultivation of much previously unused land; the application and spread of what he views much like Gordon as "once and for all" technological breakthroughs, notably electricity, mass communications, refrigeration and sanitation and finally mass education
Impact on innovation:

b. Pharma

Montalban & Sakınç (2013) show that

• large pharmaceutical companies have adopted a blockbuster model in an effort to maximize shareholder value

• the stock market is used to make large acquisitions and control the US drug market, creating a growing dependency on stock performance and blockbuster drug sales
Impact on innovation: c. Energy

Woudhuysen (2012)

• describes the current sclerosis of Western energy R&D
• explores the relations between rising energy prices and weak innovation

“Most daunting, the expectations that drive the majority of energy investment today – including the assumptions of all-important institutional investors – focus not on technological progress, but on such external factors as the price fluctuations of oil, reserve replacement ratios, and government regulations such as carbon taxes or NIMBY (‘not in my backyard’) restrictions”

“More efficient lighting (particularly compact fluorescent light bulbs) and higher efficiency standards for appliances are the low-hanging fruit in the residential sector: they require little capital and pay back their costs quickly”

Demystifying a fraudulent innovation: smart meters

• smart meters in Britain will not deliver “time of day” pricing, and will therefore will only provide a kind of usage monitoring that has for some time been available from meters already on the market
The relation:
Finance – Investment – Innovation

• Is there an Innovation Project or an Investment Project with an Innovation Strategy???
• Financialization hugely affects government support for STI
• Does financialization allow for investments in the new “green paradigm”???
Lower Investment Level: and Innovation Strategies?

USA - Private Nonresidential Fixed Investment (PFNI, red) and Corporate Profits After Tax (CP, blue) / GDP 1947-2016

Paul Krugman: there’s no puzzle here if rising profits reflect rents, not returns on investment
3. Innovation, Financialization and the «Green» Paradigm

• «Based on the assumption that climate change is inevitable, the smart money is investing in businesses that will benefit from the fact that the planet gets hotter»

  (Bloomberg Finance)

• «The current model has reached the end of its limits both for the improvement of the living conditions that it is able to offer the poor and for the environmental footprint that we can impose on the planet, but my clients ONLY invest with promises of profit, and this will not change»

  (Pavan Sukhdev, Deutsche Bank, Coordinator of the UNEP study on the transition to a 'green' model)
Summary: financialization affecting innovation

• Levels, quality and type of investment
• Strategies
• Trajectories
• Short run X long run
Why neo-Schumpeterian thought has almost ignored money

- The crucial link between innovation and finance, which was so important to Schumpeter himself, has been largely ignored by his followers (Reinert, 2004).

- The Latin American literature on technology and innovation has emphasized since the 1970s that macroeconomic instability and policies (we can them “malign” policies) produce a selection of microeconomic behaviors, oriented to short-term and high liquidity applications (Katz, 1984; Coutinho, 2003).

- Schumpeter and Keynes:
  “the two approaches are complementary in their essential meaning, though not in language and detail. In both cases the basic role of money is seen as that of giving the economic system a certain degree of structural instability which facilitates discontinuous structural changes. Those examined by Schumpeter are mainly physiological in the sense they make possible the survival and expansion of the capitalist system; those examined by Keynes are mainly pathological in the sense they obstruct the performance of an individualistic economic order” (Vercelli, 1991)

- There is an urgent need to incorporate money of as a unit of account and as the determining factor of investments in the neo-Schumpeterian program and in the innovation systems perspective.
Thank you

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