The Italian growth problem

Fabiano Schivardi
LUISS
Average yearly growth in the ‘50s: 5.5%. Down by some 1 ppt per decade, since then. Potential growth zeroed as of today.
Unexpected stop

- The slowdown was expected
- In the post-war period, Italy benefitted from the «catching-up» effect
- Cheap labor, adopt technologies from leaders
- Italy was the China of the fifties
- Problem: it did not slow down: it almost stopped!
Slowdown: More pronounced for Italy than for other large EU countries. End of grace period: ≈ early 1990s

Growth of per capita Gdp, 1951-2012

Italy

Average Fra, Ger, Spa, Uk

Fabiano Schivardi - LUISS & EIEF
Gdp growth since 1990

Italia  media(Fra, Ger, Spa, Uk)  Usa
Mostly a question of **productivity growth** disappearance

<table>
<thead>
<tr>
<th>Growth rates</th>
<th>Per capita Gdp</th>
<th>Gdp per hour worked</th>
<th>Hours per potential worker</th>
<th>Potential workers per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-80</td>
<td>+3.2</td>
<td>+2.9</td>
<td>+0.3</td>
<td>+0.0</td>
</tr>
<tr>
<td>1981-90</td>
<td>+2.3</td>
<td>+1.7</td>
<td>+0.0</td>
<td>+0.6</td>
</tr>
<tr>
<td>1991-00</td>
<td>+1.5</td>
<td>+1.5</td>
<td>+0.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>2001-10</td>
<td>-0.2</td>
<td>+0.1</td>
<td>+0.0</td>
<td>-0.3</td>
</tr>
</tbody>
</table>
Role of TFP growth

Italy: Growth Accounting
(Average growth rate per decade; percent)

For Italy, contributions to growth:
L: Labor (total hours worked)
K: Capital (net capital stock)
TFP: Solow residual

1971-1980
L: -0.2
K: 1.3
TFP: 2.6

1981-1990
L: 0.4
K: 0.9
TFP: 1.1

1991-2000
L: 0.1
K: 0.6
TFP: 0.9

2001-2010
L: 0.2
K: 0.6
TFP: -0.4

EU15
Italy
Stagnating productivity + rising wages = loss of competitiveness

Index data: 1999=100
(From data in current euros)

Italy’s manufacturing unit labor costs rising very fast with the euro
- 1999-2010: +33.6
Why so fast?
- Wages up by 39%
- Labor productivity up by a mere 5%
  (0% since 2000)

E.g. Germany: unit labor costs stayed constant, productivity and wages up by 28%
So Italy’s growth stopped long before the current crisis.

Then the Great Recession came through, in two halves.
First half of the crisis (2008-09): common shock
Second half (2011-12): for Italy and Spain only

(Gdp 2008, q1=100)

Germany recovering fast, Italy and Spain lagging quite behind, France in between.

Fabiano Schivardi - LUISS & EIEF
Italy’s industry hit very strongly during today’s crisis
One fourth of Italy’s industrial production left on the ground. In two waves.

Industrial production

April 2008 = 100


Production

Fabiano Schivardi - LUISS & EIEF
Yet domestic and external markets, two worlds apart

<table>
<thead>
<tr>
<th>Italy, Industrial production</th>
<th>Total</th>
<th>National</th>
<th>Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2008</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>April 2009</td>
<td>78.0</td>
<td>80.8</td>
<td>71.6</td>
</tr>
<tr>
<td>April 2011</td>
<td>92.5</td>
<td>91.2</td>
<td>95.7</td>
</tr>
<tr>
<td>April 2012</td>
<td>89.3</td>
<td>85.4</td>
<td>98.1</td>
</tr>
</tbody>
</table>

- Turnover from abroad is at -2 ppts from before the crisis
- Turnover from domestic markets stuck at -15 ppts from before

This is where the positive data on trade balances come from

Source: Istat

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Why Italy doesn’t grow, in a nutshell

**Diagnosis** - Italy is:
- a **rich country** (Still below Eu average, yet twice as much rich as in 1970)
- a **demographically old country** (1/5 of total population above 64; like Germany and Japan)
- a **densely populated country** (206 inhabitants per km$^2$; high-Gdp Oecd countries =30)

**Implication**
- In a rich and densely populated country, opportunities of “extensive growth” already exploited in the past
- Growth can only come from TFP: innovation, new products, better human capital...
- So the key question is: what is preventing the Italian economy to perform like other industrialized countries, that keep growing even if «rich and old»?
Is it a question of sectoral specialization?

• Surely, being specialized in low tech productions does not help
• But is it just the issue?
• No! The Italian performance is lower also within sector
• So it is a more general problem of the whole production system
## Productivity growth by sector

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1.30</td>
<td>1.54</td>
<td>0.36</td>
<td>1.97</td>
</tr>
<tr>
<td><strong>Total Manufacturing</strong></td>
<td>3.22</td>
<td>2.79</td>
<td>0.73</td>
<td>5.05</td>
</tr>
<tr>
<td>o/w Food. Beverages &amp; Tobacco</td>
<td>0.63</td>
<td>-0.86</td>
<td>0.80</td>
<td>0.84</td>
</tr>
<tr>
<td>Textile &amp; Fabric Mills</td>
<td>3.53</td>
<td>3.11</td>
<td>1.35</td>
<td>3.79</td>
</tr>
<tr>
<td>Chemicals</td>
<td>3.63</td>
<td>5.04</td>
<td>1.67</td>
<td>5.15</td>
</tr>
<tr>
<td>Optical and Electrical Equipment</td>
<td>5.98</td>
<td>6.64</td>
<td>0.61</td>
<td>16.98</td>
</tr>
<tr>
<td>Machinery</td>
<td>3.41</td>
<td>0.56</td>
<td>0.72</td>
<td>3.67</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>2.04</td>
<td>2.43</td>
<td>0.40</td>
<td>5.03</td>
</tr>
<tr>
<td><strong>Utilities (electrical power, natural gas, water)</strong></td>
<td>0.70</td>
<td>2.47</td>
<td>0.43</td>
<td>2.77</td>
</tr>
<tr>
<td>Construction</td>
<td>-0.91</td>
<td>-0.03</td>
<td>-1.20</td>
<td>-3.10</td>
</tr>
<tr>
<td>Market services</td>
<td>1.11</td>
<td>1.06</td>
<td>0.19</td>
<td>2.60</td>
</tr>
<tr>
<td>o/w Trade</td>
<td>1.33</td>
<td>2.74</td>
<td>0.10</td>
<td>4.33</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>9.32</td>
<td>9.38</td>
<td>8.44</td>
<td>5.20</td>
</tr>
<tr>
<td>Finance and Insurance services</td>
<td>2.13</td>
<td>0.31</td>
<td>2.76</td>
<td>3.04</td>
</tr>
<tr>
<td>Professional, Scientific, Technical and Administrative Services</td>
<td>-0.19</td>
<td>-1.77</td>
<td>-2.03</td>
<td>2.00</td>
</tr>
</tbody>
</table>
Have the endowments got worse?

- Product and labor market regulation, pensions, public expenditure, share of graduates....

The country undertook many reforms.

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Perché l’economia ristagna?

• Il «puzzle» è semmai perché nonostante tutto ciò la crescita è peggiorata

• Due co-indiziati:
  
  1. Un settore pubblico che «sterilizza» nella pratica gli effetti delle riforme (vedi indicatori Banca Mondiale Doing business basati sulle percezioni che dicono una storia diversa da quelli OCSE basati sui regolamenti)
  
  2. Un sistema produttivo con caratteristiche che poco si adattano al nuovo contesto economico
Traditional Model: Small Business

- Well-known prevalence of small businesses in Italy
- Common to all sectors
- Successful model in traditional sectors with medium-low level of technology
  - Economies of scale not much relevant
  - Strong efficiency in production, thanks to several externalities (industrial districts)
  - Role of exports; competitive devaluations
Table 1. *Firm size as a percentage of the EU15 average*

<table>
<thead>
<tr>
<th></th>
<th>EU15</th>
<th>DE</th>
<th>DK</th>
<th>ES</th>
<th>FI</th>
<th>FR</th>
<th>IT</th>
<th>SE</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate</td>
<td>81.66</td>
<td>0.76</td>
<td>0.22</td>
<td>0.37</td>
<td>0.94</td>
<td>0.91</td>
<td></td>
<td></td>
<td>1.32</td>
</tr>
<tr>
<td>Wood</td>
<td>103.96</td>
<td>1.90</td>
<td>1.75</td>
<td>0.34</td>
<td>3.21</td>
<td>0.68</td>
<td>0.21</td>
<td>1.63</td>
<td>0.93</td>
</tr>
<tr>
<td>Leather</td>
<td>105.10</td>
<td>0.48</td>
<td></td>
<td>0.77</td>
<td>2.05</td>
<td>0.51</td>
<td>0.47</td>
<td></td>
<td>2.21</td>
</tr>
<tr>
<td>Construction</td>
<td>106.72</td>
<td>1.23</td>
<td>1.17</td>
<td>1.06</td>
<td>1.86</td>
<td>1.32</td>
<td>0.38</td>
<td>3.36</td>
<td>0.86</td>
</tr>
<tr>
<td>Textile</td>
<td>175.35</td>
<td>1.86</td>
<td>0.61</td>
<td>0.65</td>
<td>1.06</td>
<td>0.95</td>
<td>0.48</td>
<td>0.49</td>
<td>1.96</td>
</tr>
<tr>
<td>Hotel &amp; Restaurant</td>
<td>182.68</td>
<td>0.83</td>
<td>0.71</td>
<td>0.33</td>
<td>1.31</td>
<td>0.84</td>
<td>0.43</td>
<td>0.78</td>
<td>3.56</td>
</tr>
<tr>
<td>Other Services</td>
<td>204.85</td>
<td>1.40</td>
<td></td>
<td>1.22</td>
<td>2.44</td>
<td>0.72</td>
<td>0.68</td>
<td>1.08</td>
<td>1.38</td>
</tr>
<tr>
<td>Business Services</td>
<td>254.28</td>
<td>1.14</td>
<td>1.12</td>
<td>0.63</td>
<td>0.77</td>
<td>1.40</td>
<td>0.30</td>
<td>0.70</td>
<td>1.23</td>
</tr>
<tr>
<td>Paper &amp; Publishing</td>
<td>300.65</td>
<td>1.57</td>
<td>1.63</td>
<td>0.51</td>
<td>2.99</td>
<td>0.72</td>
<td>0.60</td>
<td>1.28</td>
<td>0.97</td>
</tr>
<tr>
<td>Metal Prod.</td>
<td>305.03</td>
<td>1.55</td>
<td>0.45</td>
<td>0.59</td>
<td>1.71</td>
<td>1.05</td>
<td>0.48</td>
<td>1.22</td>
<td>0.90</td>
</tr>
<tr>
<td>Non-met. Prod.</td>
<td>319.66</td>
<td>1.84</td>
<td>1.16</td>
<td>0.50</td>
<td>0.79</td>
<td>1.35</td>
<td>0.44</td>
<td>0.81</td>
<td>1.38</td>
</tr>
<tr>
<td>Food</td>
<td>338.66</td>
<td>0.91</td>
<td>1.95</td>
<td>0.58</td>
<td>1.68</td>
<td>0.84</td>
<td>0.75</td>
<td>1.69</td>
<td>2.46</td>
</tr>
<tr>
<td>Trade</td>
<td>343.04</td>
<td>1.35</td>
<td>1.11</td>
<td>0.44</td>
<td>0.63</td>
<td>0.76</td>
<td>0.16</td>
<td>0.62</td>
<td>2.91</td>
</tr>
<tr>
<td>Transport</td>
<td>347.03</td>
<td>1.57</td>
<td>0.51</td>
<td>0.60</td>
<td>1.02</td>
<td>1.32</td>
<td>0.70</td>
<td>0.89</td>
<td>1.35</td>
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<tr>
<td>Rubber</td>
<td>394.55</td>
<td>1.65</td>
<td>0.50</td>
<td>0.77</td>
<td>0.67</td>
<td>1.29</td>
<td>0.44</td>
<td>0.53</td>
<td>0.72</td>
</tr>
<tr>
<td>Machinery</td>
<td>406.08</td>
<td>1.33</td>
<td>1.09</td>
<td>0.56</td>
<td>0.89</td>
<td>1.44</td>
<td>0.94</td>
<td>1.09</td>
<td>0.92</td>
</tr>
<tr>
<td>Other Manuf.</td>
<td>532.43</td>
<td>2.00</td>
<td>0.36</td>
<td>0.11</td>
<td>0.32</td>
<td>0.31</td>
<td>0.09</td>
<td>0.22</td>
<td>0.30</td>
</tr>
<tr>
<td>Chemical</td>
<td>728.99</td>
<td>1.72</td>
<td>0.94</td>
<td>0.43</td>
<td>1.06</td>
<td>0.87</td>
<td>0.70</td>
<td>0.84</td>
<td>1.07</td>
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<tr>
<td>Elect. Mach.</td>
<td>780.51</td>
<td>1.49</td>
<td>0.30</td>
<td>0.46</td>
<td>0.78</td>
<td>0.79</td>
<td>0.52</td>
<td>1.48</td>
<td>0.62</td>
</tr>
<tr>
<td>Finance</td>
<td>1163.84</td>
<td>0.94</td>
<td>0.66</td>
<td>1.15</td>
<td>0.92</td>
<td>1.03</td>
<td></td>
<td>1.53</td>
<td>1.55</td>
</tr>
<tr>
<td>Petroleum</td>
<td>1196.54</td>
<td>1.40</td>
<td>0</td>
<td>1.15</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Transp. Equip.</td>
<td>1742.63</td>
<td>1.93</td>
<td>0.31</td>
<td>0.67</td>
<td>0.42</td>
<td>1.14</td>
<td>0.88</td>
<td>0.84</td>
<td>0.72</td>
</tr>
<tr>
<td>Total</td>
<td>336.33</td>
<td>1.58</td>
<td>0.97</td>
<td>0.58</td>
<td>1.06</td>
<td>0.98</td>
<td>0.42</td>
<td>1.13</td>
<td>1.58</td>
</tr>
</tbody>
</table>
What Has Changed?

1. Technology: ICT
   – New technologies best fitting in firms with a “standardized knowledge”

2. Globalization
   – New competitors with low production costs

3. Euro
   – Competitive devaluation no longer an option
Why Firm Size is Important?

• Pure price competition is not sustainable
• Firms with market power are favoured in the new competitive environment
• In manufacturing market power depends on product differentiation
• Typical case: high tech sectors
  – Competition on product innovation
  – Pagano-Schivardi (2003): business size is key to grow in innovative sectors
  – Italian comparative advantage in other sectors
“Tertiarization” within Manufacturing Industries

• Nowadays scale is fundamental in all sectors
• Supporting evidence from a joint research project with Bank of Italy: successful manufacturing firms are moving their boundary closer to the “tertiary sector”:
  – strategy focused on activities that support (precede or follow) the production process: engineering, branding, assistance and distribution
  – Resulting product differentiation reduces demand elasticity and allows to face international competition
  – Investment in intangible assets
“Tertiarization...”: II

• Same arguments becoming relevant even in traditional activities
• Old model mainly based on production efficiency is failing
• Even in traditional sectors there is evidence that successful firms rely more on “tertiary” activities
• Success often depends on factors unrelated to the strict manufacturing process
• Evidence of an ongoing process?

Fabiano Schivardi - LUISS & EIEF
Fig. 2: Average Share of Blue Collars in Italian Manufacturing

Source: Bugamelli, Schivardi & Zizza, 2008, “The euro and firm restructuring”
Fig. 3: Blue Collar Share by Technological Intensity

(a) low tech

(b) medium-low tech

(c) medium-high tech

(d) high tech
Intangible Assets in SME

as % of total assets for firms with sales btw 2-50 €mln

(2010 vs 2007)
At the aggregate level, reasons for low growth performance
Result #1: Key Role of Intangibles vs. Physical Capital

• Implications for:
  – Aid to firms – 488, Legge Sabbatini
  – Tangibles vs. Intangibles Infrastructures
  – Institutional framework: Intangibles need more legal protection
Firm Size, revisited

- Fixed costs are increasingly fundamental
- Size also important in terms of “customer base” and brand awareness
- Key is not to have firms with many employees
- ... but firms investing in intangible assets to achieve market power
- Example: Nero Giardini
(In)Efficient Resource Allocation

• Pareto efficiency: good firms grow, bad firms exit
• Italy: lack of Pareto efficiency?
• Evidences of restructuring before the crisis:
  – Strong increase in productivity and profitability dispersion
  – No evidence of a job reallocation increase

... see next two figures
Productivity and Profitability Dispersion across Firms

Productivity

Profits


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Job creation and destruction rates

![Graph showing job creation and destruction rates over the years from 1990 to 2005. The graph indicates periods of job destruction and job creation with corresponding values on the y-axis.]
Missing Growth Opportunities

• Size is not the problem, rather:
  1. Growth opportunities not exploited
  2. Bad firms survive in the market
• What does hinder allocation efficiency?
• A long list: fiscal burden, labour market, bureaucracy ...
Result #2: Importance of Allocation Efficiency/Business Growth

• Implications:
  – Policies to support businesses
  – Welfare policies enabling factors mobility
Corporate governance, finance and management

- Intangible Assets:
  1. High Risk
     • Family owned businesses feature low diversification
     • Require equity investment
  2. Require specific managerial skills
     • Need to hire managers outside the family circle
  3. Require huge financial resources
     • Size and capitalization

- Italian businesses lack these characteristics: SME form the main structure, but cannot be left alone and the framework must be expanded
Focus: Corporate governance and finance

- Two related and important aspects
- Case studies: family entrepreneurs very cautious in adopting growth strategies
- Priority is not to lose firm control
- Tend to be hostile to equity and managerial outside contributions
- Difficulties in management turnover, though with some positive recent evidence (Tab.4, Fig.4)
### Firm Size

% of exporting firms, by size

<table>
<thead>
<tr>
<th>Size Class</th>
<th>AUT</th>
<th>FRA</th>
<th>GER</th>
<th>HUN</th>
<th>ITA</th>
<th>SPA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-19</td>
<td>69.8</td>
<td>44.7</td>
<td>45.7</td>
<td>58.0</td>
<td>65.4</td>
<td>51.2</td>
<td>54.9</td>
</tr>
<tr>
<td>20-49</td>
<td>63.8</td>
<td>59.1</td>
<td>65.4</td>
<td>64.7</td>
<td>73.3</td>
<td>63.5</td>
<td>62.8</td>
</tr>
<tr>
<td>50-249</td>
<td>88.6</td>
<td>75.4</td>
<td>78.2</td>
<td>79.3</td>
<td>86.6</td>
<td>76.2</td>
<td>76.8</td>
</tr>
<tr>
<td>more than 249</td>
<td>90.8</td>
<td>87.6</td>
<td>84.0</td>
<td>97.4</td>
<td>92.6</td>
<td>88.0</td>
<td>80.7</td>
</tr>
<tr>
<td>Total</td>
<td>72.6</td>
<td>57.9</td>
<td>63.4</td>
<td>67.3</td>
<td>72.2</td>
<td>61.1</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Source: The Global Operations of European Firms, Navaretti Bugamelli Schivardi

- Small Italian firms more export oriented but size is a weakness
- Export would increase by 37% with the German size structure
Control and Finance, 2

• Market for corporate control undeveloped
  – Family owned firms are good in some context, bad in other
  – Especially not well behaving when facing the opportunity to grow in scale
  – Bank debt is good to finance physical capital, not for intangibles
  – More equity needed
## Ownership and Finance

Ownership and Financial Structure of Firms in 7 European Countries, 2008

<table>
<thead>
<tr>
<th>% of firms:</th>
<th>AUT</th>
<th>FRA</th>
<th>GER</th>
<th>HUN</th>
<th>ITA</th>
<th>SPA</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Ownership</td>
<td>12.8</td>
<td>10.3</td>
<td>6.3</td>
<td>19.8</td>
<td>4.1</td>
<td>4.5</td>
<td>12.2</td>
</tr>
<tr>
<td>Venture Capital</td>
<td>2.2</td>
<td>1.9</td>
<td>1.3</td>
<td>0.9</td>
<td>0.5</td>
<td>1.0</td>
<td>5.7</td>
</tr>
<tr>
<td>% Bank debt to Total Debt</td>
<td>87.0</td>
<td>78.7</td>
<td>83.9</td>
<td>82.9</td>
<td>87.5</td>
<td>86.4</td>
<td>65.2</td>
</tr>
</tbody>
</table>

Source: The Global Operations of European Firms, Navaretti Bugamelli Schivardi
Ownership and Control

<table>
<thead>
<tr>
<th>Family owned Firms (%)</th>
<th>Family Owned Only:</th>
<th>Management within family (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CEO from the family (%)</td>
<td></td>
</tr>
<tr>
<td>France 80.0</td>
<td>62.2</td>
<td>25.8</td>
</tr>
<tr>
<td>Germany 89.8</td>
<td>84.5</td>
<td>28.0</td>
</tr>
<tr>
<td>Italy 85.6</td>
<td>83.9</td>
<td>66.3</td>
</tr>
<tr>
<td>Spain 83.0</td>
<td>79.6</td>
<td>35.5</td>
</tr>
<tr>
<td>UK 80.5</td>
<td>70.8</td>
<td>10.4</td>
</tr>
</tbody>
</table>

Source: Bugamelli et al., Bank of Italy, EFIGE data
Result #3: Business Ownership, Control and Finance model exhibit excess dependence from family and banking system

• Implications:
  – Market for corporate control
  – Equity vs. bank debt
  – Institutional/Foreign investors
  – Management
“De profundis” for Small Businesses?

• Can Networks help overcome size weaknesses?
• Network Agreements: develop common investments in intangibles
• Much discussed
• It works for food brands
• Is it true in general? Common Brands? Distributional Networks?
An emerging hierarchy in Districts?

– A Leader is large enough to bear investment in intangibles
– It relies on a *fringe* of small traditional firms
– It would explain the transition toward simpler organizational forms (evidence in SOSE data)
– In line with Focus Groups on a strategic supplier
– Is there a role for Small Firms in an integrated productive system?
Debate on firm size

• Efficient systems consist of plural size and ownership structures
• No good system in general
• In the Italian system small-family-banks prevail
• Dimension is not a problem *per se*, but for missed growth opportunities
Industrial Relations

• Allocative efficiency is important
• ... but firm size is a weakness
  – Fiat example: plants governability issue
• In family owned SME implicit contracts partly replace the lack of legal norms
• Large scale requires explicit contracts and enforcement
International evidence on managerial practices by ownership type

Source: WMS (World Management Survey), 21 countries

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Facts #4:
Industrial Relations need a stable institutional framework

• Implications:
  – Representative System
  – Labour market reforms
  – Legal system
Innovation in the light of our theory

• We now move on to focus on innovation using the «lenses» of the theory that we just formulated
Large differences in R&D expenditure across Europe

(share of GDP)

Source: OECD, 2008
More similarity in “innovativeness”

Share of innovative firms

Source: CIS, 2008

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Patents and R&D positively related

Source: Lotti-Schivardi (2005). Patents data are from the EPO; employment and R&D personnel data from the OECD Main Science and Technology Indicators database.
Large differences in efficiency of R&D

Source: Lotti-Schivardi (2005). Patents data are from the EPO; employment and R&D personnel data from the OECD Main Science and Technology Indicators database.
Useful to think at two drivers of innovation:

• Country characteristics: financial system, education system, sectoral specialization....

• Firm characteristics: firm size distribution, ownership structure, financial structure
Differences from Germany in patent propensity, firm data

Panel A: Probability of having at least one patent. Panel B: number of patents.
Source: Lotti-Schivardi (2005), EPO and Amadeus
Role of firm size

- Old debate (Schumpeter): both needed

Share of innovative firms, by size

Source: CIS, 2008
### Obstacles to innovation activity

- The importance of financial constraints decreases with firm size.
- Riskiness much more relevant in Italy and Spain, more based on bank finance, less in the UK, with a more market based financial system.

<table>
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<tr>
<th>Country</th>
<th>10-49</th>
<th>50-249</th>
<th>&gt;250</th>
<th>totale</th>
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Source: Bugamelli et al., 2011, Efige Data
Barriers to growth in Europe

Low propensity of young EU firms to grow: Why? Finance and ownership structure?

Figure 5 Percentage increase in average firm size (at 7 years of age) relative to size at entry, manufacturing.

Source: Bartelsmann, Scarpetta and Schivardi, 2005
Focus: La rivoluzione IT

Basato su un lavoro in corso con Tom Schmitz (Bocconi)

Dalla metà degli anni novanta le IT sono comparse anche nelle statistiche

Meno nei paesi del sud Europa: perché?

Non è un problema di offerta

Source: OECD and EU KLEMS.
Adozione di IT in Italia e Germania

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<th>Max speed [8] GER</th>
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</table>

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Evidenza sulle pratiche manageriali dalla WMS

Panel A: Management score

Evidenza: IT è complementare alla qualità delle pratiche manageriali

Ipotesi: questa complementarietà penalizza le imprese del sud Europa, che hanno pratiche mediamente peggiori

(Perché? Non affrontato in questo lavoro. Ruolo importante della corporate governane and control)

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Crescita della produttività e pratiche manageriali prima e dopo la rivoluzione IT

Panel A: 1985-1995

Panel B: 1995-2008

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Quanto può spiegare della divergenza Nord-Sud Europa?

• Costruiamo un modello in cui la sola differenza fra paesi è nelle pratiche manageriali
• ICT e pratiche manageriali sono complementari
• Pratiche manageriali formali richiedono lavoratori istruiti
• Il progresso tecnologico aumenta la produttività delle IT
• Calibriamo il modello con vari dati micro e macro
• Risultati principale: Lo svantaggio in termini di pratiche manageriali diventa più saliente con la rivoluzione IT
Risultati da un modello calibrato: 1995-2008

Table 8: Quantitative results for the baseline calibration

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<tr>
<td></td>
<td>DEU</td>
<td>ITA</td>
</tr>
<tr>
<td>Productivity rel. to Germany</td>
<td>1</td>
<td>0.980</td>
</tr>
<tr>
<td>Productivity growth</td>
<td>11.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Share of actual divergence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- l’Italia cresceerà i 2/3 della Germania e la metà degli USA (relativamente al contributo alla crescita di IT)
Quali politiche possono aiutare?

- Abbiamo simulato una serie di politiche: sussidio all’adozione di IC (Industria 4.0) e sussidio all’istruzione per accrescere i laureati che possono fare i managers (borse di studio)
- Non migliorano la situazione – sussidi all’istruzione contribuiscono alla «fuga dei cervelli»
  – Motivo: il basso tasso di adozione/laureati è un sintomo della minor efficienza delle imprese nell’utilizzo delle IT, non una causa
- Curare il sintomo non aiuta: bisogna lavorare sulla causa del malessere
Qualcosa si muove sul fronte capitalizzazione e accesso a finanza

• Rapporto di previsione (Box su Investimenti e fonti di finanziamento):
  – le condizioni finanziarie sono migliorate, anche grazie a una serie di riforme (minibonds, PIR,...)
  – Ma potrebbero ancora essere vincolate molto PMI, più dipendenti dalle banche

• Siamo giunti a stesse conclusioni nel Rapporto Cerved PMI 2017:
  – Il leverage delle imprese è diminuito sensibilmente, in buona parte per conferimenti di capitale di rischio, e con esso la rischiosità delle imprese
  – Abbiamo stimato che 52.000 PMI potrebbero aumentare l’indebitamento per circa 100 miliardi complessivi mantenendo un profilo di rischio estremamente contenuto

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Forte rafforzamento struttura pratrimoniale

Rapporto tra debiti finanziari e capitale netto per dimensione d'impresa

Fonte: Rapporto Cerved PMI 2017

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Ma rimane una tendenza a chiudersi a capitale e competenze esterne

- Aumento equity prevalentemente da fonti interne (?)
- Sviluppo di finanza alternativa langue:
  - Raccolta private equity e venture capital pari a 1.313 milioni di euro (-47%) rispetto ai 2.487 milioni del 2015 (Fonte AIFI)
  - Raccogliamo per VC una frazione della Spagna
- Sono importanti non solo per capitale ma anche perché immettono competenze
- Management esterno nelle imprese familiari: abbiamo evidenza aneddottica di entrambe le strade (Zambon e Lavazza vs. Ferrero e Pesenti), ma poca evidenza sistematica

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CONCLUSIONE

• Non è il paese che è peggiorato
• Il mondo è cambiato in una direzione sfavorevole rispetto alle nostre «dotazioni»
• Abbiamo bisogno di un sistema imprenditoriale che si affranchi dal modello famiglia-banca e si apra ad apporti di capitale e di competenze esterne all’ambito familiare