ACCELERATING INNOVATION in BRAZIL

MEI Leadership Committee Meeting
CNI, São Paulo, SP
March 2nd, 2018
Accelerating Innovation in Brazil: Addressing the larger questions

- What are the principal challenges to creating an environment that is conducive to innovation in Brazil? How can they be overcome?

- How do the SENAI innovation institutes fit within the larger innovation ecosystem in Brazil, and how can they foster greater innovation at the regional and national level?

- What can MIT do in collaboration with its Brazilian partners to support the emergence of a forward looking innovation agenda in 2018 and beyond?
Accelerating Innovation in Brazil: MIT IPC-SENAI Project Research Pillars

**Institutions & Policies**
- Institutional fragmentation
- Industrial and innovation policies
- Emerging innovation agenda

**Networks & Ecosystems**
- Institutional innovation
- Universities as engines of innovation
- RTOs and innovation intermediaries

**SENAI and ISIs**
- Organizational transformation
- Organizational dynamics
- SENAI/SESI call for projects

**Global Value Chains**
- Key firms and industries
- GVC insertion and upgrading
- Carving out role in R&D networks

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**MIT Industrial Performance Center**
Brazil’s Innovation Agenda: Progress, challenges and diagnoses

• Despite significant progress, the gains associated with Brazil’s innovation policies and programs have been limited. Many factors contribute to this, but three primary reasons are:

  **Global integration:** Brazil needs to be better integrated in the global economy to benefit from the global flow of goods, services, and ideas

  **Costs and risk:** the cost of knowledge-intensive inputs and the risks associated with investing in innovation are too high

  **Specialization:** programs and incentives are spread too broadly, and should be more focused on Brazil’s areas of comparative advantage to support specialization

  **MEI is uniquely placed** to drive this agenda forward
1. Ensure that industrial policies support innovation

**PPB: Selected Local Content Requirements for Tablets**

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**Informatics Law R&D Spending and Outsourcing Requirements**

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<th>Expenditures</th>
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<tr>
<td>(Can also be spent via third parties)</td>
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<tr>
<td><strong>External Expenditures</strong></td>
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<tr>
<td>Certified institutes anywhere in Brazil</td>
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2. Foster greater global integration

**Brazil’s Trade Balance in Three “GVC” Industries, 2002-2014, US$ thousands**

**Brazil’s Foreign Direct Investment Inflows and Outflows, 1970-2016 US$ million**


3. Enhance the role of universities in building Brazil’s innovation capacity

- Minimize bureaucracy, create incentives, and foster the right environment to support risk-taking and streamline interactions with industry partners
- Support and reward specialization in universities that can show national and global excellence in particular disciplines or fields
- Focus technology transfer offices on translation and impact more so than revenue
  - Patenting bottleneck in Brazil is inhibiting translational impact
  - “A patent without a license is the worst of all worlds. You spend money and tie up technology”
4. Support institutional innovations that enhance the innovation ecosystem
5. Encourage entrepreneurial pathways

Successful startups in Brazil:

- Leverage Brazil’s innovation ecosystem for technology, funding, and mentorship
- Seek foreign partners to raise capital, acquire technology, and/or develop markets overseas
- Address problems in Brazil and in other countries, rather than focusing on the domestic market alone
6. Build long-range strategies around sectors in which Brazil has a comparative advantage
Priorities for Brazil’s Innovation Agenda in 2018 and Beyond

1. Ensure that industrial policies support innovation
2. Foster greater global integration
3. Build long-range strategies around sectors in which Brazil has a comparative advantage
4. Enhance the role of universities in building Brazil’s innovation capacity
5. Encourage entrepreneurial pathways
6. Support institutional innovations that enhance the innovation ecosystem
Building a Forward-Looking Innovation Agenda

- **There has been significant progress in the last 20 years. However, ongoing political and economic crises threaten to derail the country’s innovation agenda**

- **Brazil cannot afford to fall further behind** as the pace of technological change quickens and the globalization of production and innovation grows in scale and scope

- Brazil’s **social policy agenda is tightly linked to its innovation and growth agenda**. They must be understood as two sides of the same coin. Without the latter, there is no ability to support the former