



## Fostering innovation through workplace diversity in Brazil

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### Key messages

- **Workforce diversity may increase productivity through innovation**
- **An innovative and productive workforce will be age and gender diverse**
- **Policies are needed to encourage age- and gender-diverse hiring practices**

### Women and youth face discrimination in the Brazilian labor market

Discrimination continues to plague the Brazilian labor market. Women earn considerably less than men and young people face persistent high levels of unemployment and underemployment. The gender pay gap is mainly ascribed to social norms, and a lack of education and experience discourages firms from hiring youth.

Innovation is a key driver of productive growth and workforce diversity may encourage innovation. If this is the case, policies that encourage workforce diversity could help Brazil achieve sustainable long-term growth more dynamically. However, how workforce diversity contributes to innovation has been under-explored, and the literature is unclear on whether it can promote firm performance in a broader range of indicators.

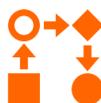
**A team of local PEP researchers sought to analyze the effect of workforce diversity on innovation outcomes in Brazil.** In addition, they investigated the type of innovation outcome (product, process, organizational, marketing) that gender, age or racial diversity can foster.

#### What are innovation outcomes?



##### Product

New or improved products introduced into the market



##### Process

New methods, flows and solutions implemented in operational processes



##### Organizational

New ways of structuring human resources are adopted to expand competitive capacity



##### Marketing

New approaches and processes for marketing are adopted to transform the company's positioning in the market



### The experiment

The research team combined large data from Brazil's Manufacturing Survey (PIA/IBGE) and Innovation Survey (PINTEC/IBGE) with the employers-employee administrative record (RAIS/Ministry of Economy) that provided information on firm's workforce characteristics. The data were for manufacturing firms with more than 30 employees, from 2001 to 2014.

To explore gender diversity, the team used information from the Maternity Leave Extension Program combined with the daycare coverage ratio at the state level and divorce rates at the municipal level.

To explore age diversity, the team used the Brazilian Apprenticeship Program accounts.

The team used the Shannon and Weaver (1949) diversity index to measure workforce diversity within a given firm in terms of inherent characteristics (i.e. features that cannot be changed or improved):

- Gender: Female or male
- Age: Juniors (younger than 24), adults (ages 24 to 40), seniors (40+ years old)
- Race: White or non-white

## Key findings

### Workforce diversity can increase productivity through innovation:

- Gender diversity fosters marketing innovation
- Age diversity boosts product and marketing innovation

However, racial diversity was found to hamper process and organizational innovation.

### Gender diversity

Firms that were more diverse in terms of the gender of the workforce tended to introduce a range of different marketing strategies over time. The findings suggest that gender diversity may be more relevant to promoting intangible values (such as the brand) than tangible ones (new products).

### Age diversity

Contrary to the international literature, age diversity was found to enable Brazilian firms to innovate more. In particular, having three generations working in a firm creates an appropriate environment for new product development. The interaction between different generations harnesses new ideas from the youth and combines them with experience from more mature workers.

## Conclusions and policy implications

The research findings show that diversity among workers comes with both benefits and costs. By showing a causal link between diversity and innovation, the team's findings highlight how **hiring policies that promote, or require, a diverse workforce – particularly in terms of age and gender – can encourage innovation in Brazil**. Firms able to innovate more tend to become more competitive and obtain larger profits. Indeed, **by not mixing their employees in terms of gender and age, firms may be wasting resources**.

**Policies that encourage diverse hiring practices should therefore be implemented.** For example:

1. Policies to increase gender diversity could include increasing paternity leave and/or the flexibility of maternity leave, as well as providing child care support.
2. To encourage age diversity, programs designed to attract young professionals should be improved and twinned with programs that promote employment for experienced professionals.

