

# INFORMALITY

Issue 1 of VoxDev's new VoxDevLit

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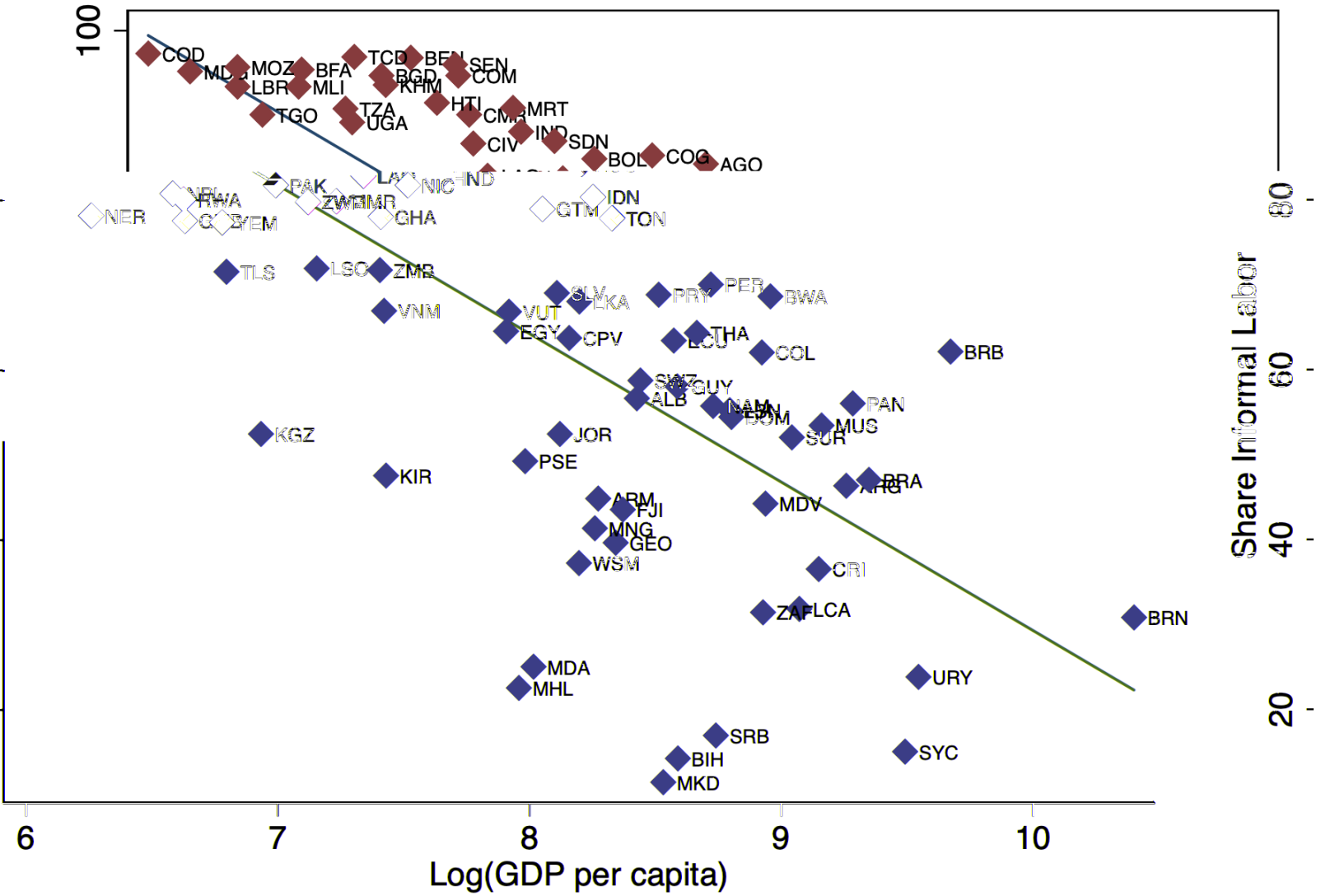
# Why should we care?

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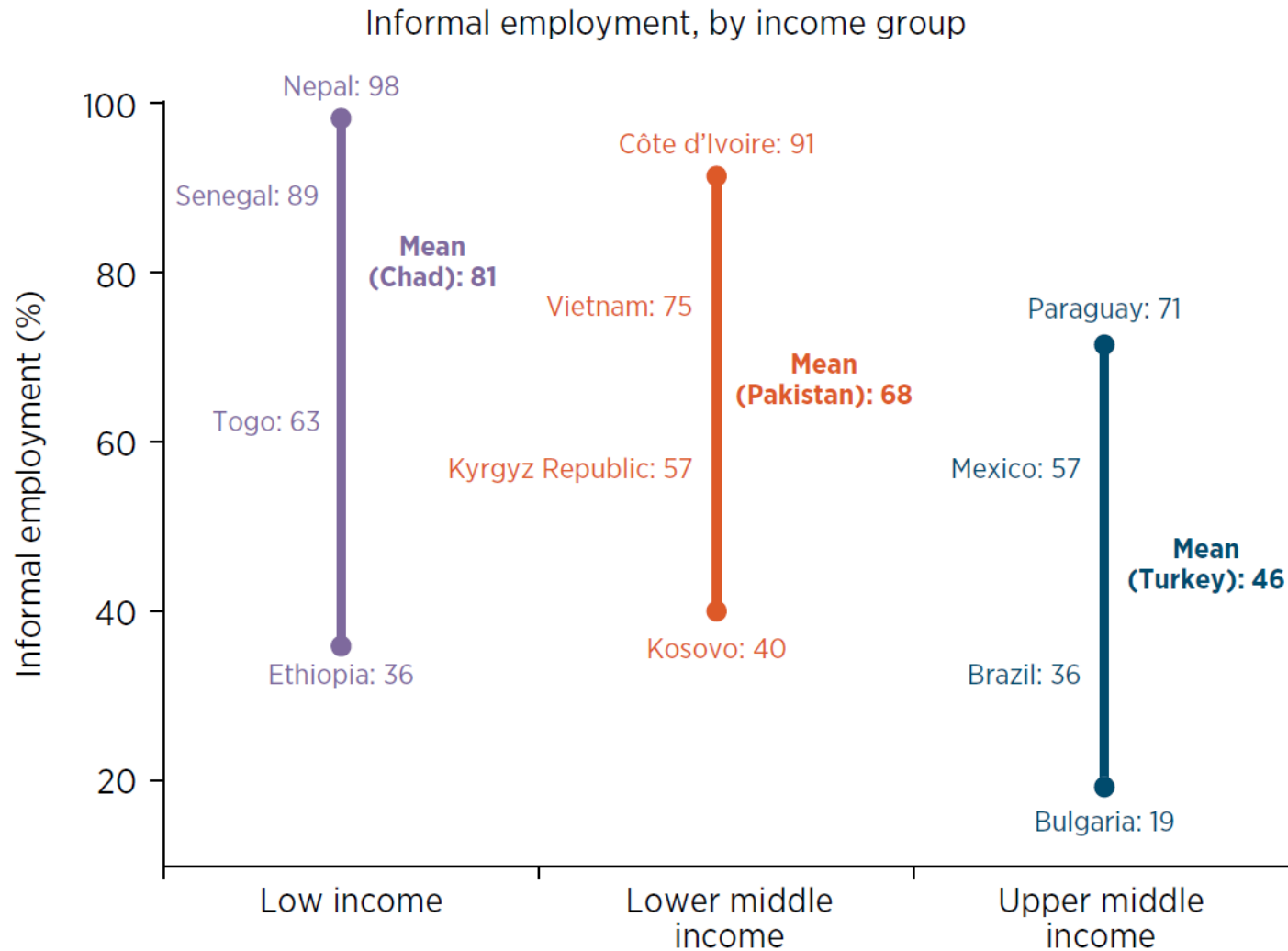
**High informality** is a defining characteristic of most developing economies:

- 30-70% of economic activity
- 20-80% of labour force
- Equally large share of **firms**

It is negatively correlated with economic development...

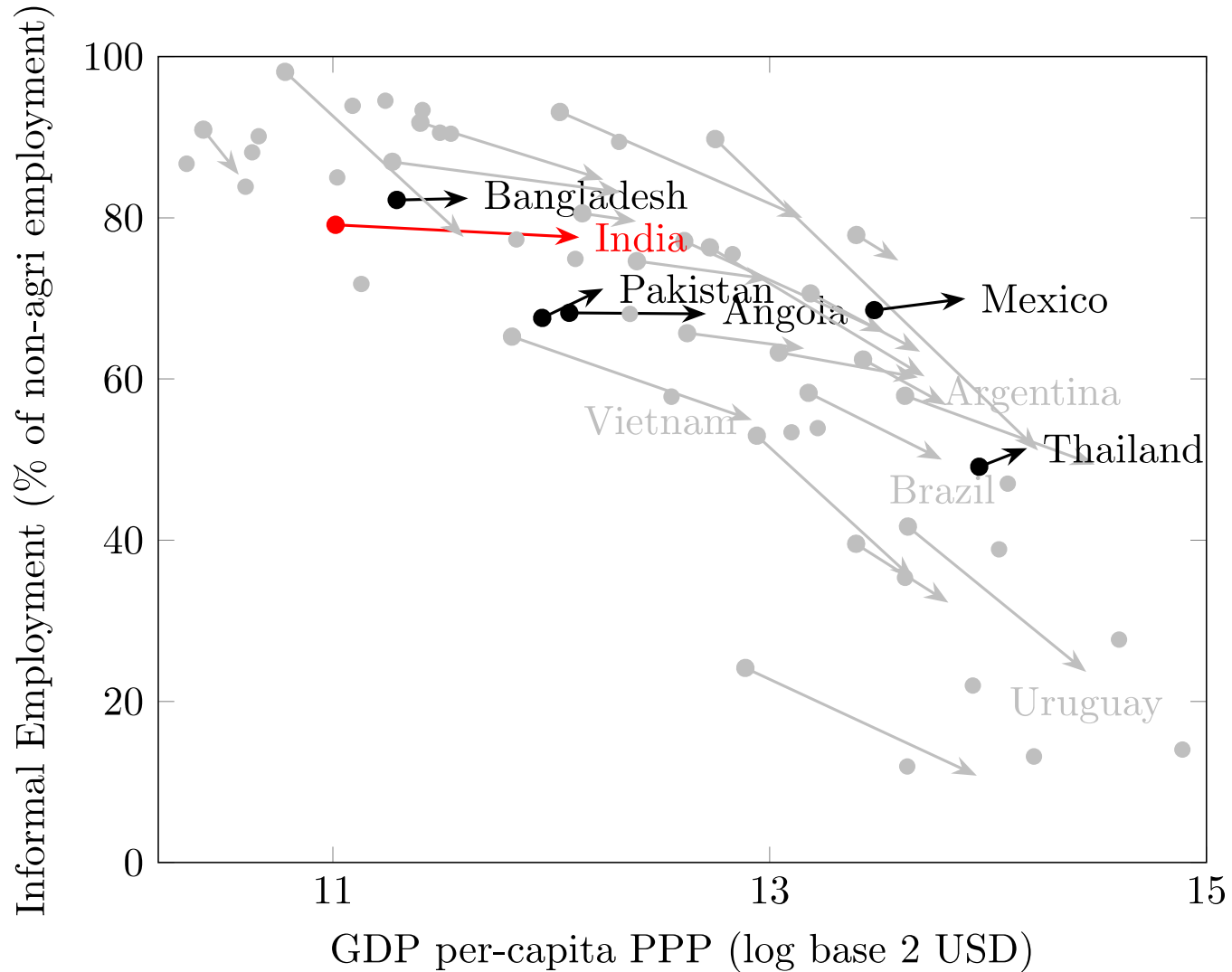


...but there is huge variation even within income groups



Source: Penny Goldberg's Gorman Lecture, 2022.

# Countries are unlikely to simply "grow out of informality"



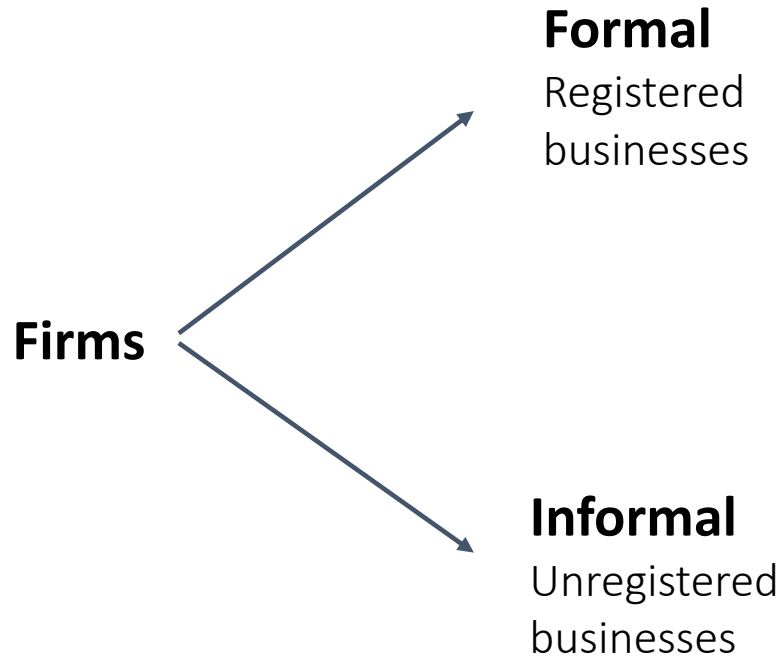
- Understanding the causes and consequences of informality is therefore central for economic development
- These high levels of informality have significant implications for firms, workers, families, and consumers.
- These, in turn, can result in potentially large aggregate effects.

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This **VoxDevLit**: What we have learned about the **causes and consequences of informality** for economic development?

# Definitions: Margins of Informality

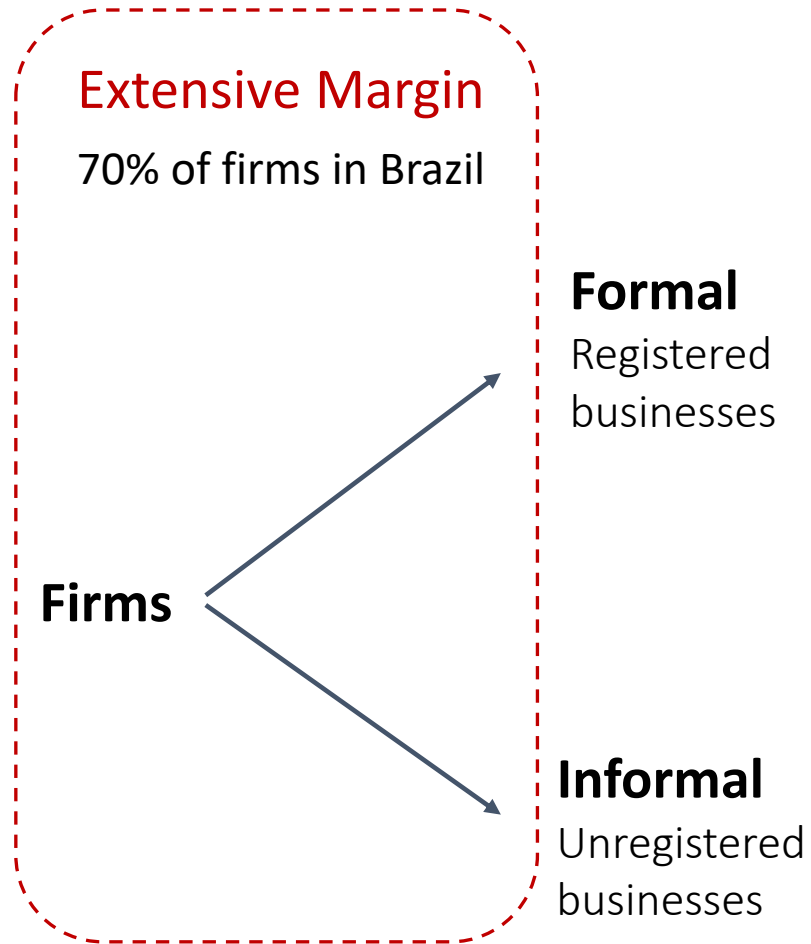
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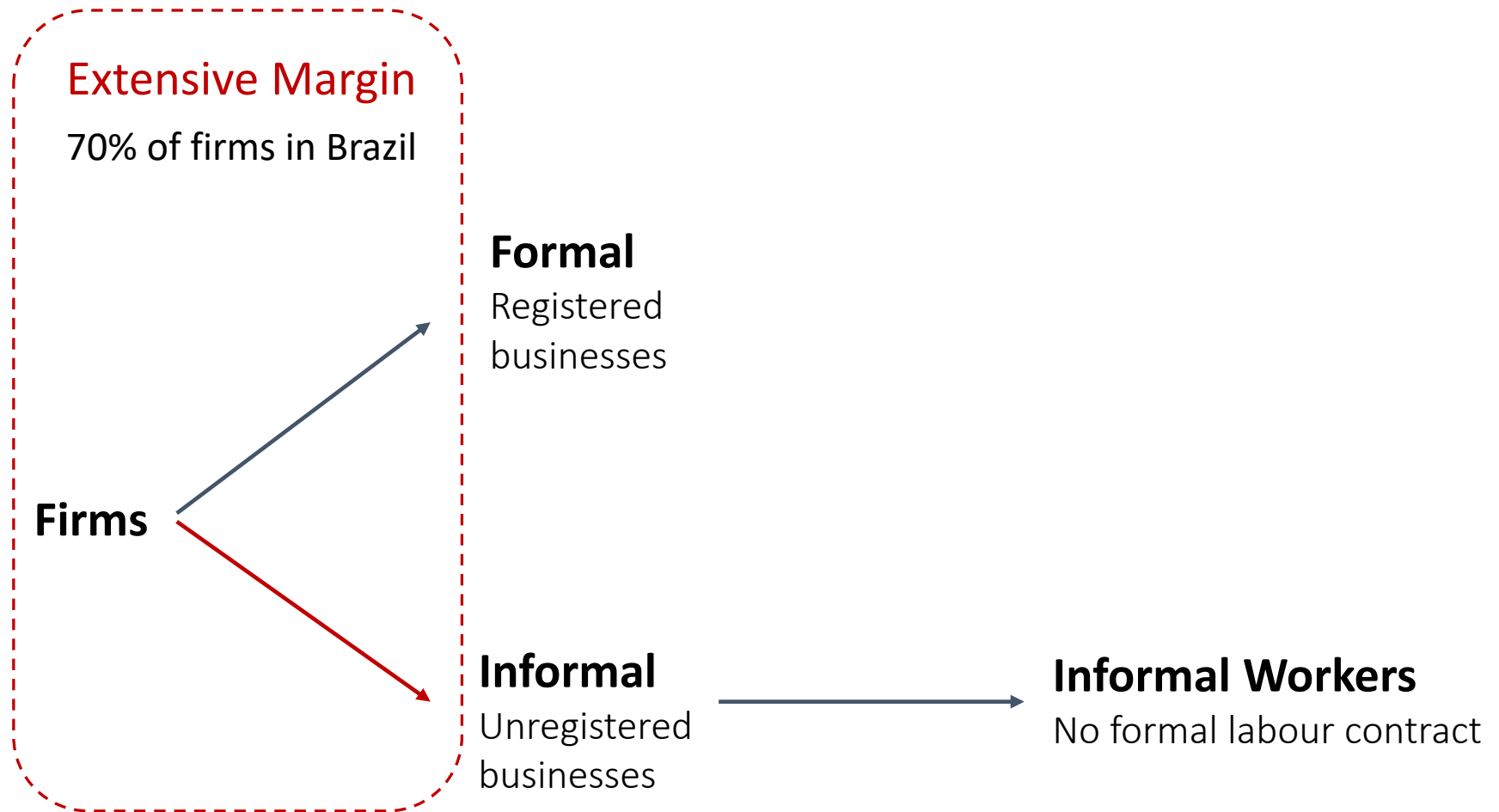


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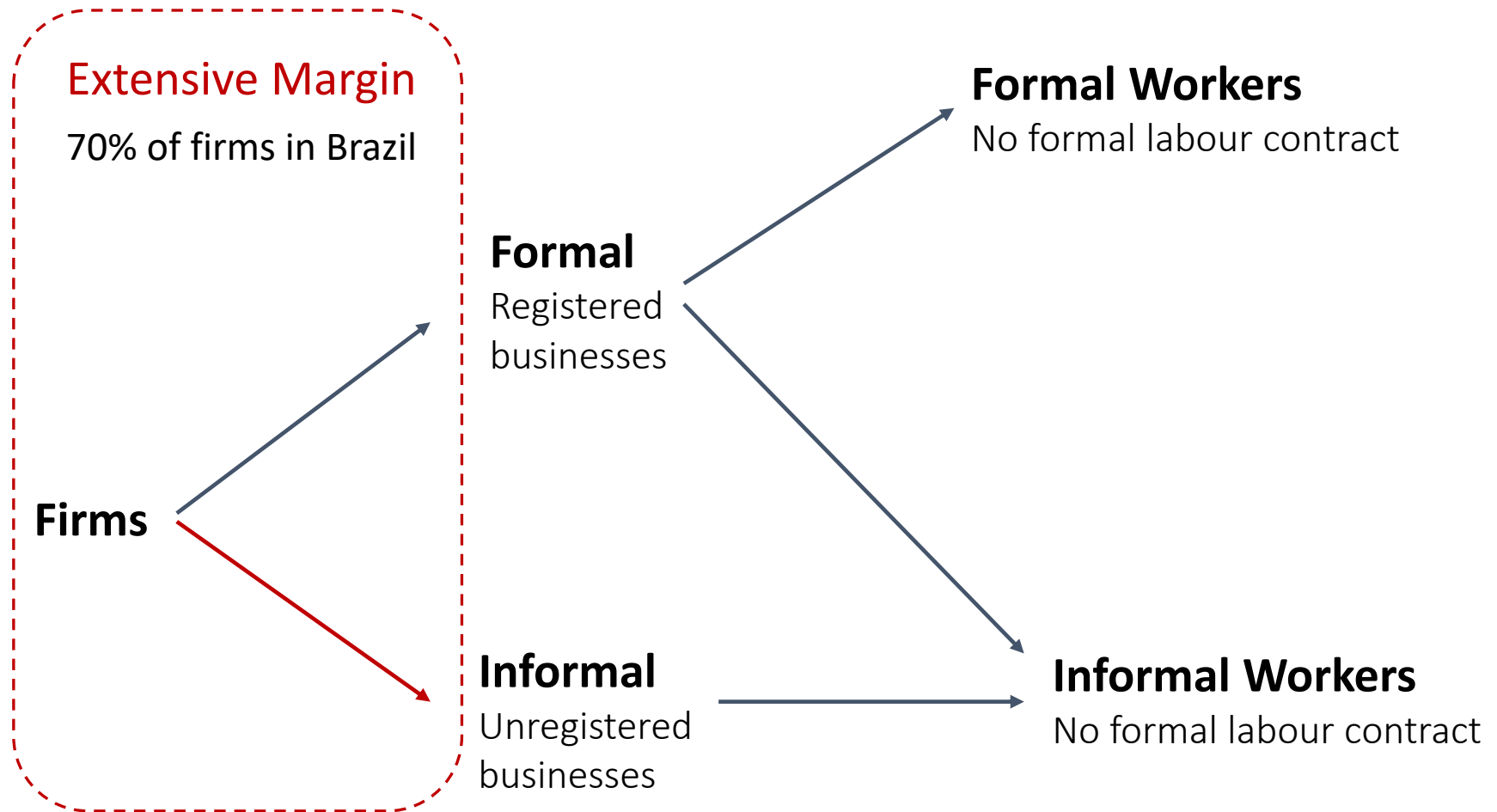
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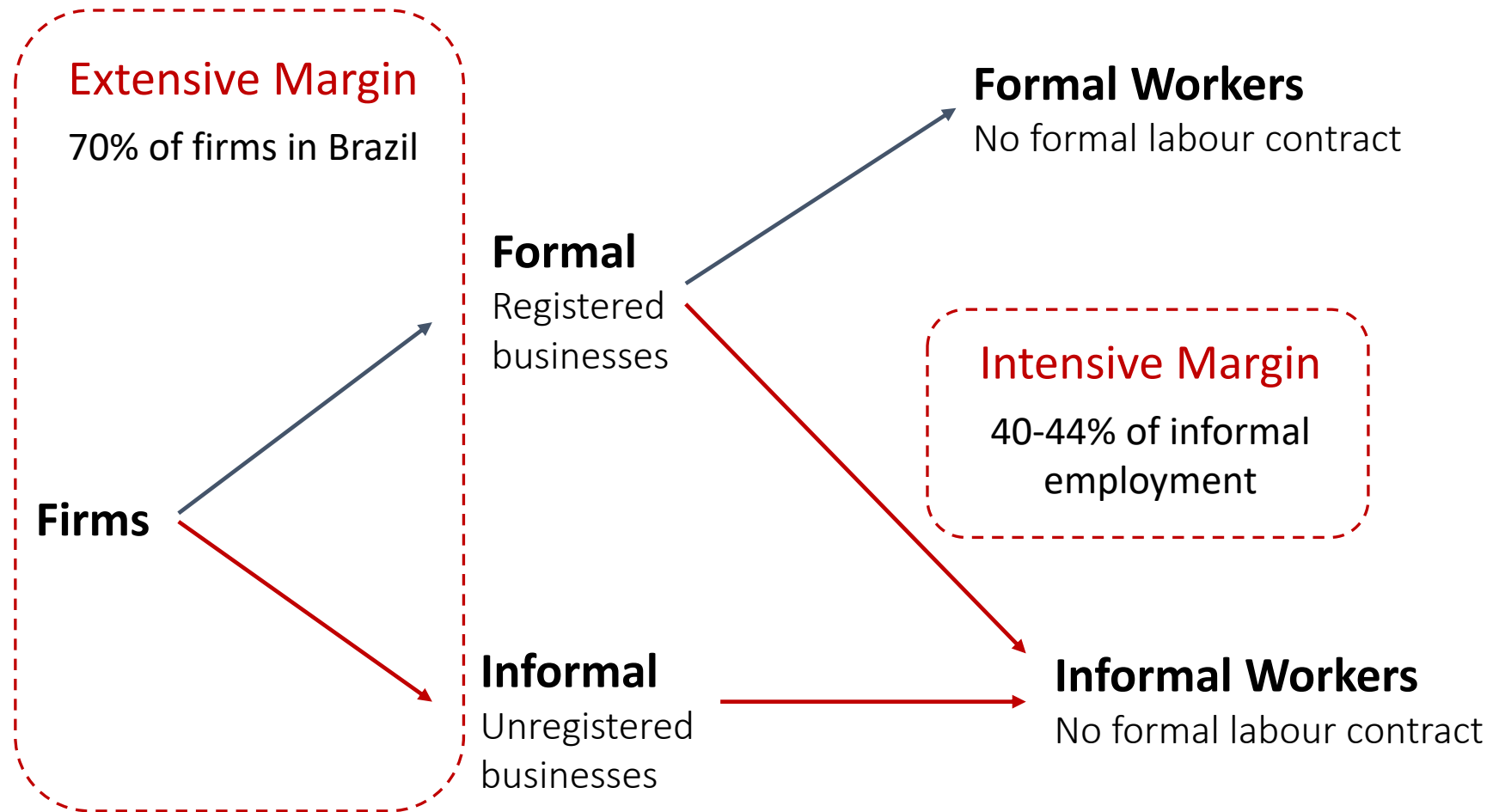
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## 1. Facts

- Workers
- Firms

## 2. Determinants

- Firms
- Workers

## 3. Consequences

- Firms
- Taxation and redistribution
- Aggregate outcomes

1. Informality displays a **U-shape pattern** w.r.t age, it is **higher** among women and low-skill workers.
2. Informal employment is strongly **counter-cyclical**:
  - i. Formal job finding rate is strongly pro-cyclical; informal JFR is stable
  - ii. Informal to formal transitions are pro-cyclical.
  - iii. Separation rates are countercyclical in both sectors.
3. Substantial **formal-informal wage gap**; **but within-firm wage gap** is zero
  - i. Self-selection is one of the main drivers of the wage gap
  - ii. Conditional on workers' skill, formal and informal workers perform similar tasks within the firm

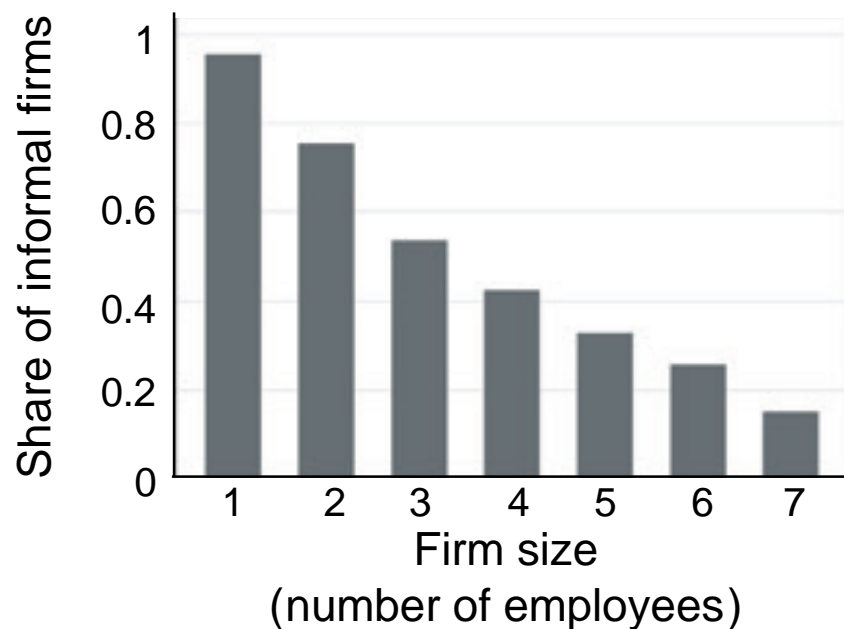
- Intensive margin of informality represents a large fraction of informal employment
- Informal firms are *on average* smaller, pay lower wages, are run by less educated individuals, hire less educated workers and earn lower profits than formal firms

Nevertheless, there is **no evidence of duality**:

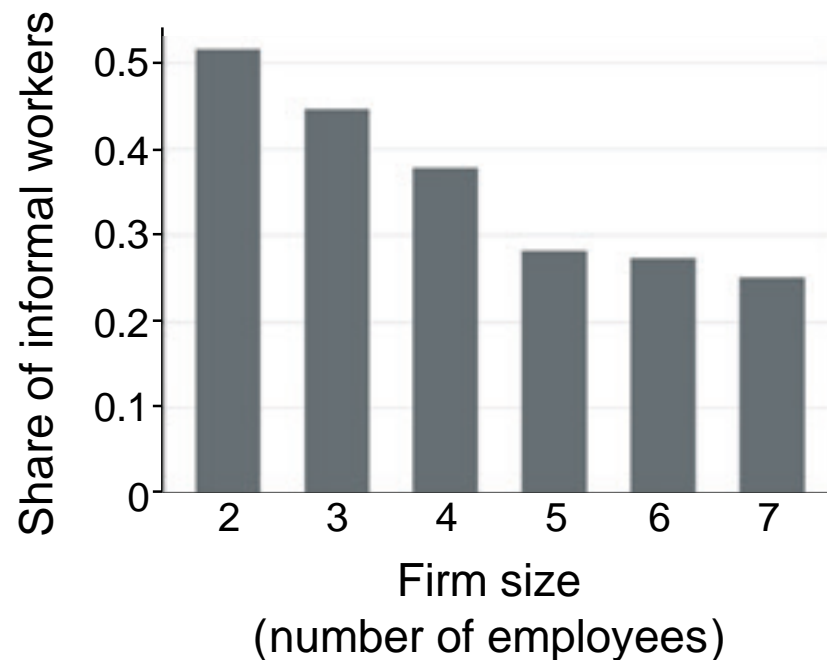
- Formal and informal firms coexist within the same industries and produce similar products
- There is a substantial overlap in formal and informal firms' productivity distributions (even within industries)

Both margins of informality decline with **firm size**

Panel A. Extensive margin



Panel B. Intensive margin



Same is true with respect to **firms' age!**



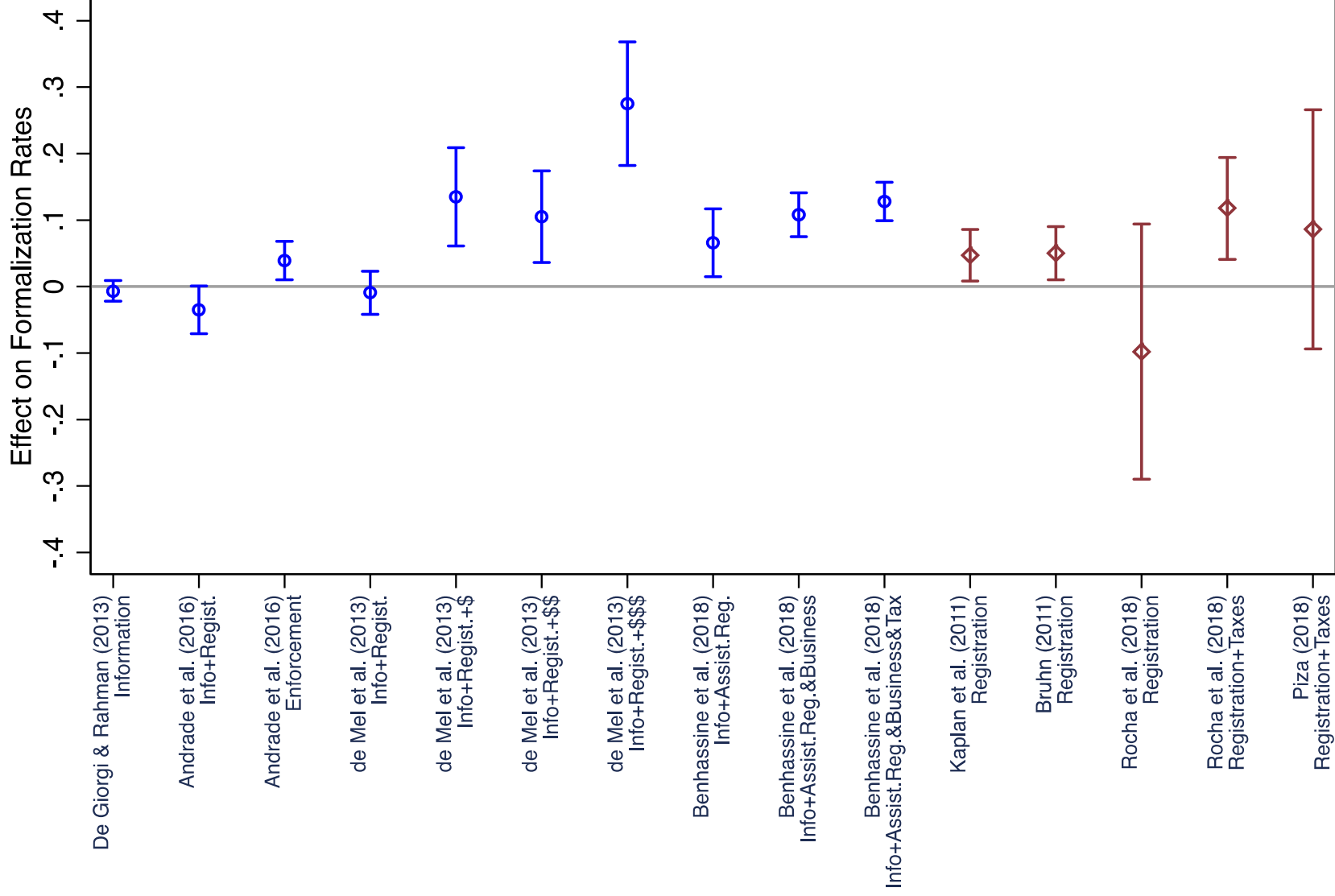
# DETERMINANTS: FIRMS

If policy makers want to **reduce informality**, they can:

1. Reduce the **costs of formality**:
  - i. Costs of entering the formal sector (e.g. registration costs)
  - ii. Costs of remaining formal (e.g. tax payments)
2. Increase the **benefits of formality**, e.g. improve credit access
3. Increase the **costs of informality** via greater enforcement of the existing laws and regulations

By and large, policies/interventions analyzed in the literature **focus on group 1**, in particular the **reduction of entry costs**.

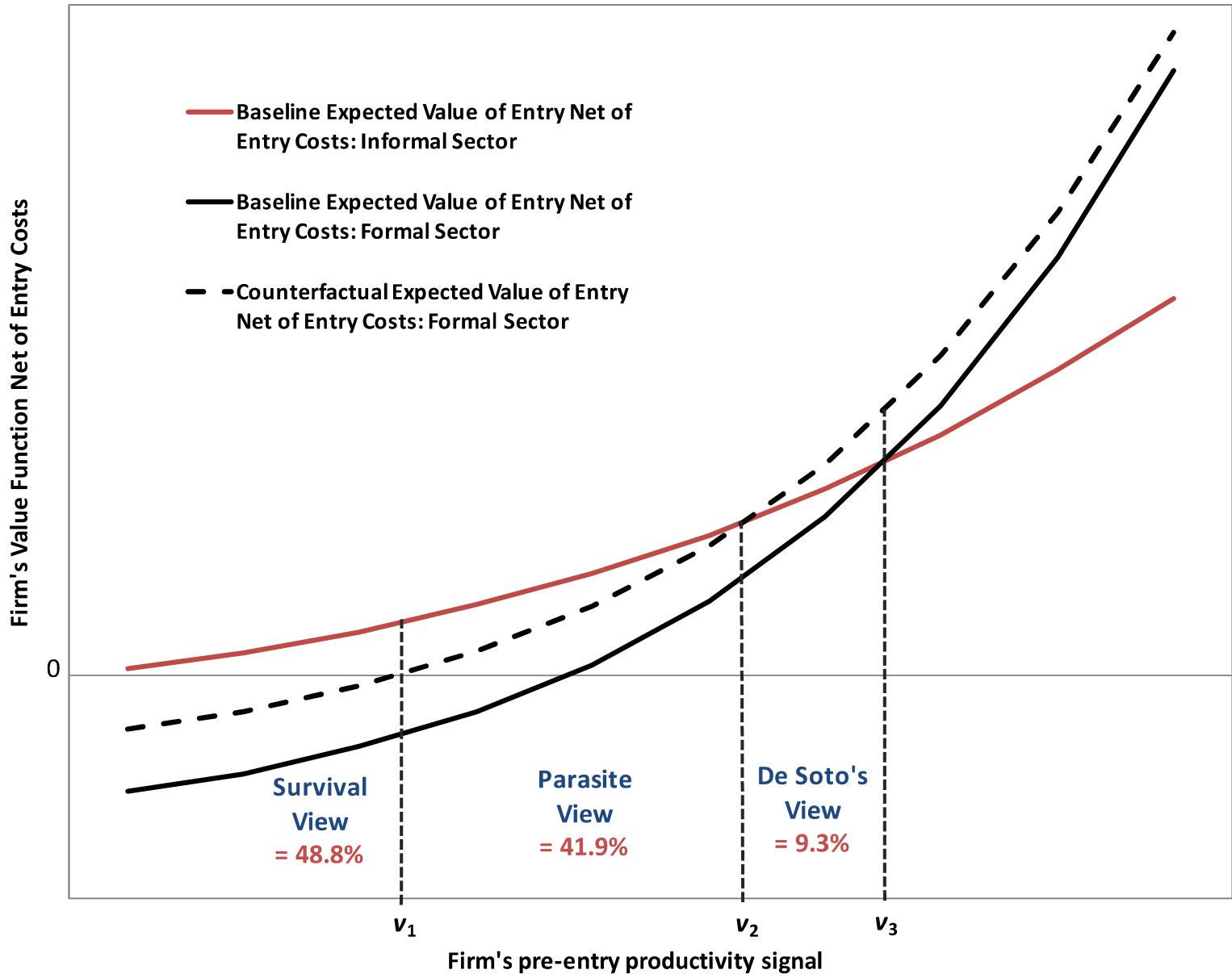
# What does the empirical literature say?



## Summarizing:

- Providing information about registration (and potential benefits) or reducing registration costs has **very limited effects**.
- **Largest formalization effects** come from interventions that reduce the costs of staying in the formal sector or that increase the benefits of formality
- Policies that increase the costs of informality have received far less attention by policy makers and empirical studies.
- Existing results suggest strong formalization effects but there can be **adverse effects** as well, both at the firm and aggregate levels.

# Why? A potential interpretation...



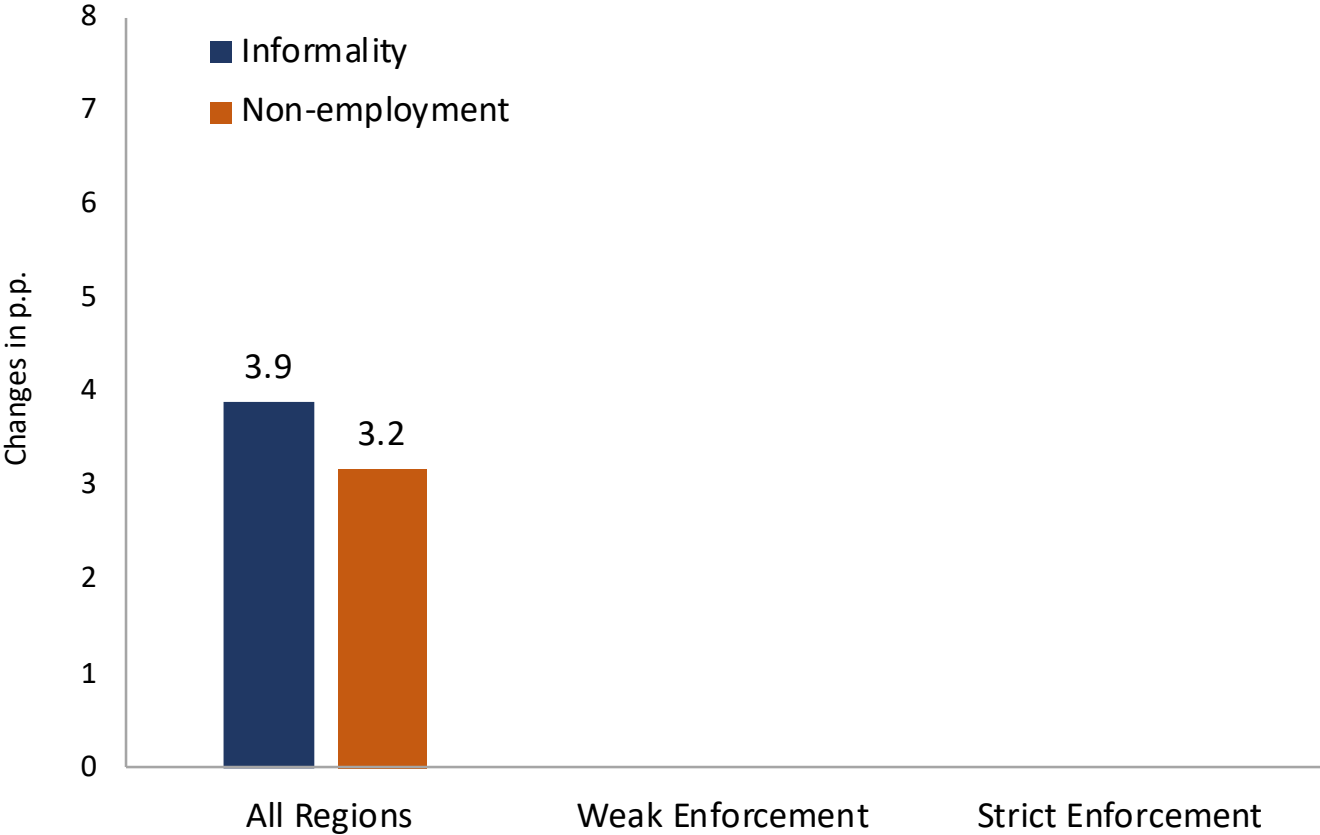
- The **tax structure** that firms face is a key determinant of firms' decision to be formal, but one that has received little attention in the literature.
- Example: The role of value-added tax (VAT) in transmitting (in)formality via its credit scheme, up and downstream in the supply chain
- Many open questions here!

- Strong effects of trade on both **firm** and **labor informality**
- Exposure to foreign competition leads to higher informality among low skill workers, but with **two opposing forces**:
  - i. The least productive (informal) firms exit: **extensive margin**
  - ii. Formal firms cut costs by hiring informal workers: **intensive margin**
- Greater access to foreign markets can reduce firm informality

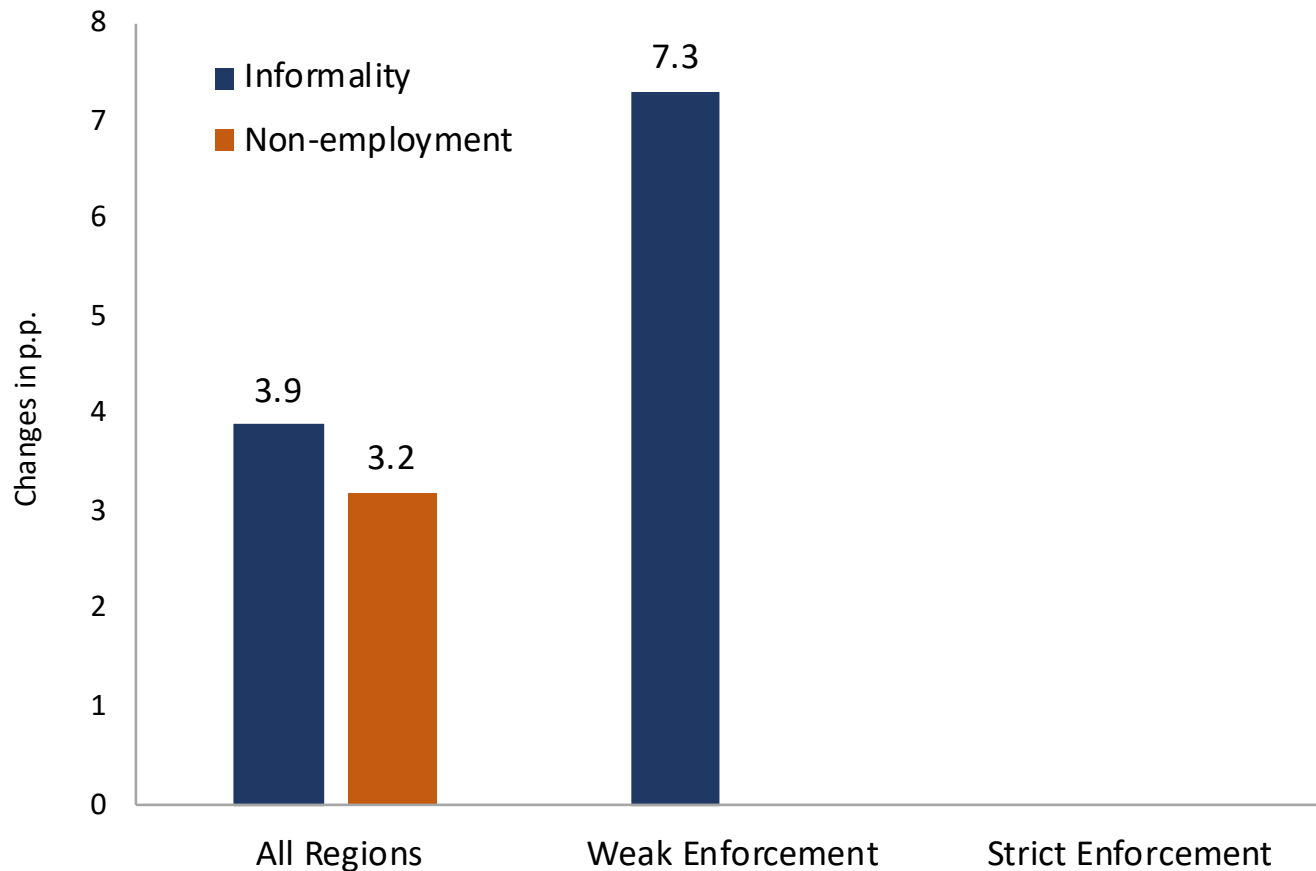
Higher informality is not necessarily bad; it can help reducing employment losses



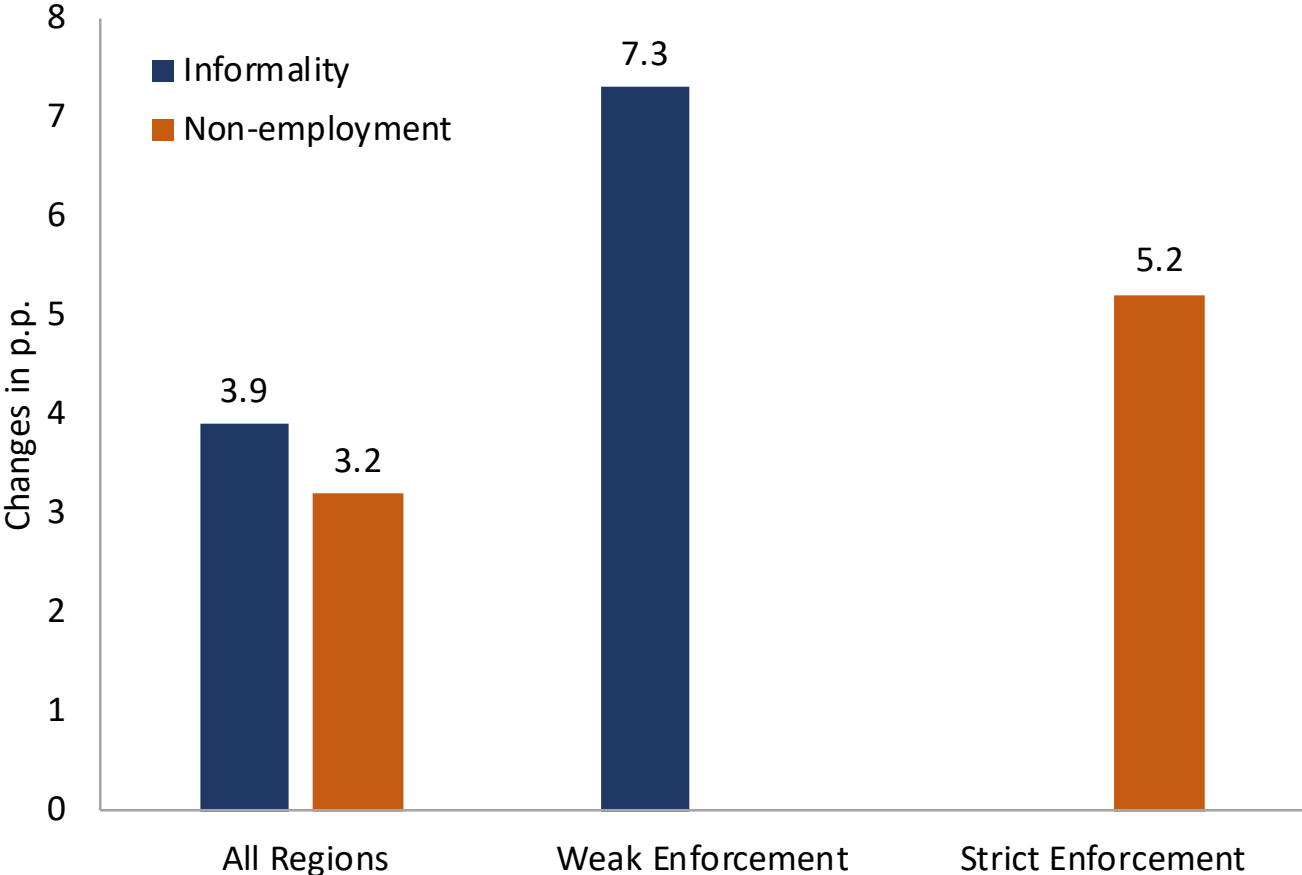
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Welfare effects? Need a structural model!

Results suggest that informality is a “employment buffer” but not a “welfare buffer”

# DETERMINANTS: WORKERS

- **Concern:** welfare programs could shift labor supply from the formal to the informal sector. True for both *means-tested* and *universal programs*.
- **Evidence:**
  - **Universal health coverage** (Mexico and Colombia) led to small increases in informal employment. Evidence that the value of these benefits is low.
  - **Cash transfer programs:**
    - **Worker-level:** evidence from Brazil, Argentina, and Uruguay indicates that both informality and non-employment increase.
    - **Aggregate effects** from Brazil: Bolsa Família (PBF) led to an increase in local formal employment in Brazil.
- **Active area of research:** dynamic effects over the life cycle

# CONSEQUENCES

- The results in the literature indicate that formalization has **no effects** on different measures of **firm performance** (sales, profits, size,...)
- Consistently, firms that formalize do not seem to change any meaningful behavior (access to finance, formal banking, investments,...).
- Whenever there are positive average effects, these are driven by few firms experiencing substantial growth.
- This lack of effect is consistent with the argument that the **perceived benefits of formalization are very low** for most small-scale entrepreneurs.
- It might be the case that the positive effects of formality take long to appear. Even then, these results are not encouraging, as the costs kick in upon formalization.

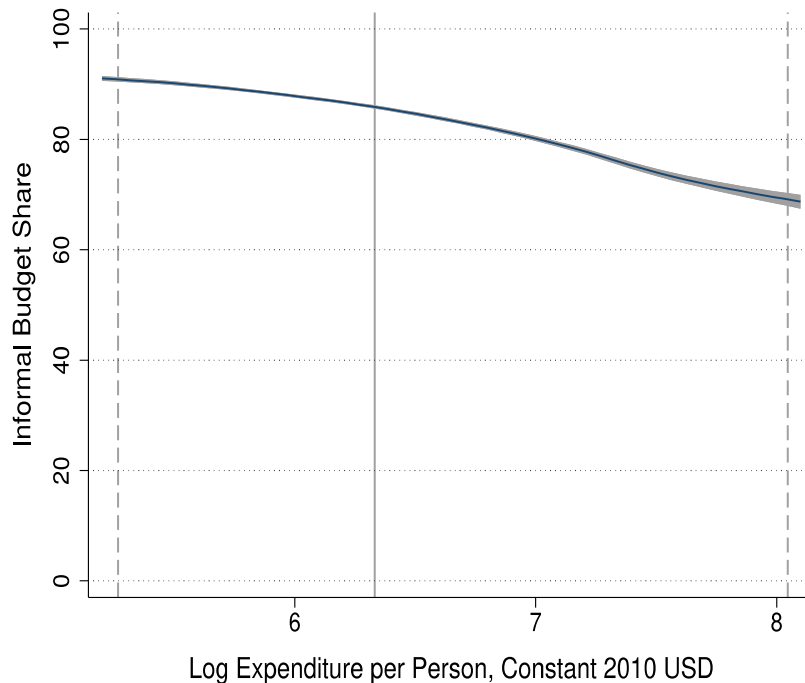


High informality levels change the redistributive properties of taxation.

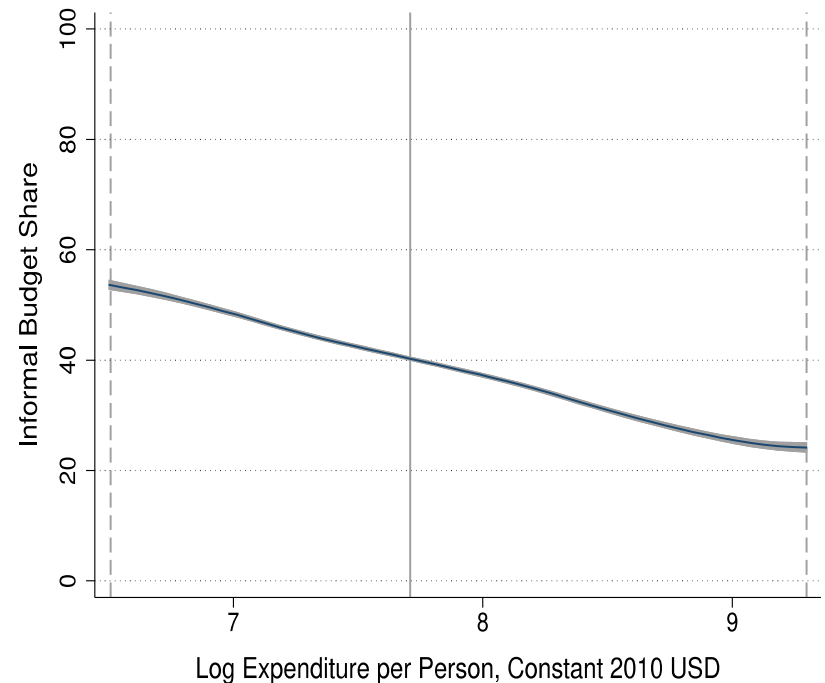
If the expenditure share of informal goods systematically varies with income, the presence of informal sectors will change the incidence of consumption taxes.

## Informality Engel curves:

(a) Rwanda



(b) Mexico



Informality can lead to lower levels of aggregate human capital via two equilibrium mechanisms:

**1. Lower individual investments in schooling**

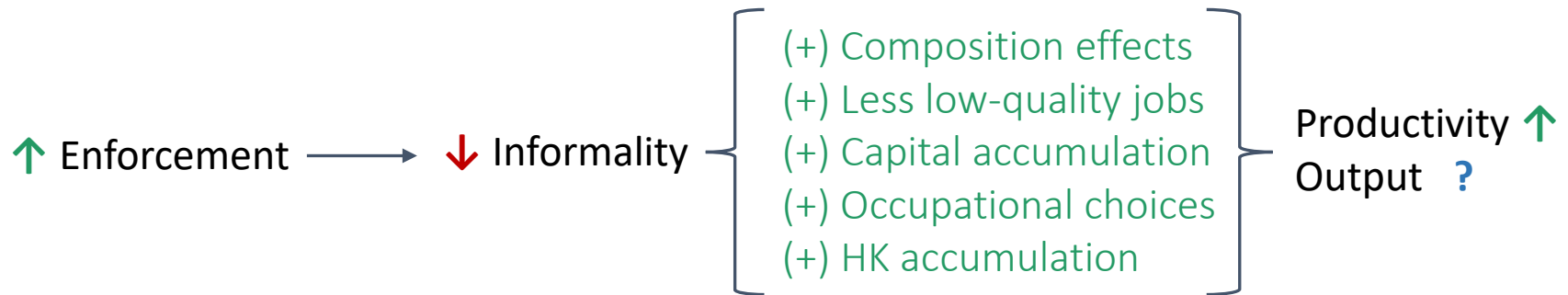
- Informality reduces the effective returns to schooling → individuals invest less in their education.
- Eliminating informal jobs can increase schooling investments by 10% but at the cost of decreasing welfare of workers and firms.

**2. Lower on-the-job human capital accumulation**

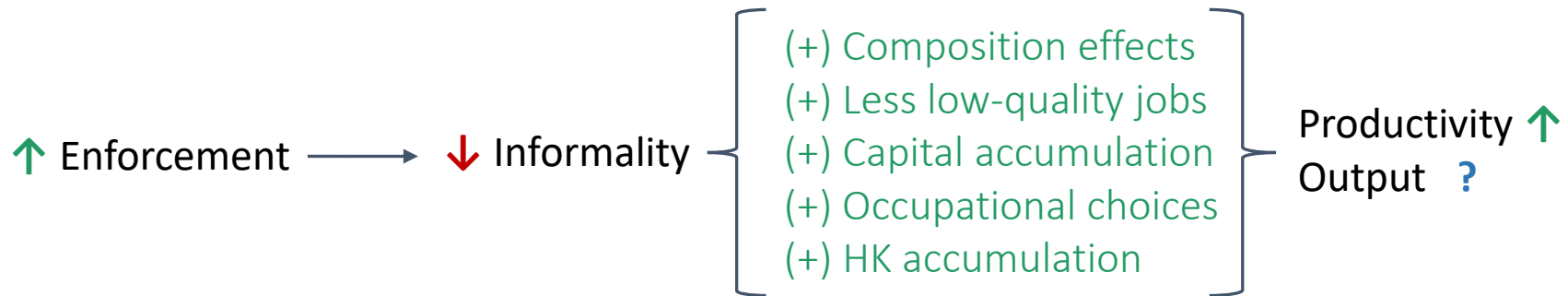
- Results show that on-the-job human capital is slower in informal jobs

The aggregate effects of reducing informality crucially depend on the policy instrument used to achieve it. We will focus on **enforcement** and **entry costs**.

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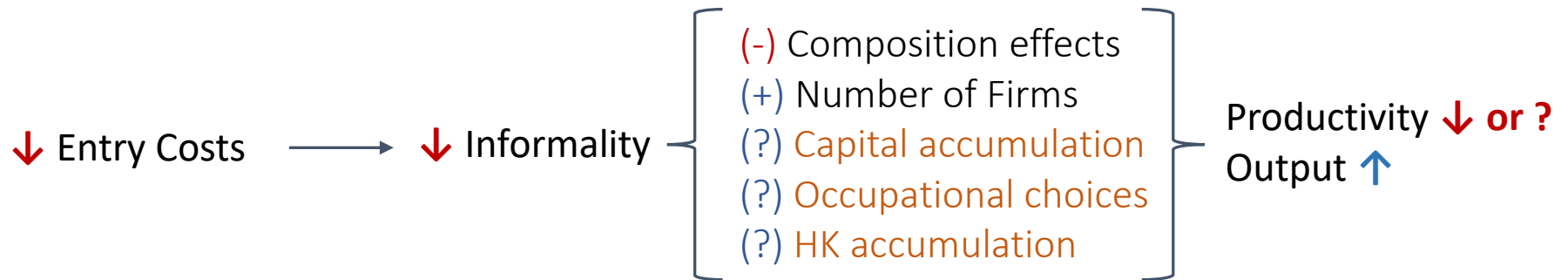
The aggregate effects of reducing informality crucially depend on the policy instrument used to achieve it. We will focus on **enforcement** and **entry costs**.



However, greater enforcement can have adverse effects on welfare, due to higher unemployment for example. [The literature shows mixed results.](#)

Key dimension: how much employment reallocation there can be from low-productivity informal firms to more productive formal firms.

**Open question:** transition dynamics!



## Open questions:

- What is the role of other (formal sector) frictions in shaping these effects?
- Even without the positive composition effects, can we observe positive effects on occupational choices, K and HK accumulation?

**Taxes:** reductions in the tax burden have limited formalization effects

- The literature has made substantial progress in understanding the main determinants of **firms' choices** regarding informality.
- Despite the emphasis on firms' decisions, there remain many important unanswered questions.
  - The literature has **only started to explore**