



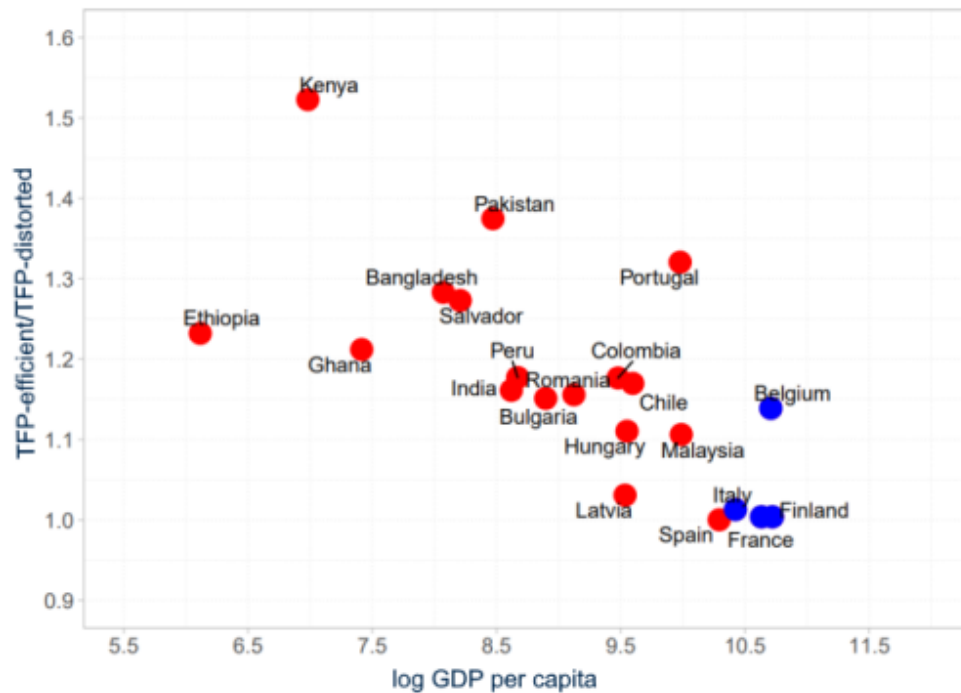
# RESEARCH NEWSLETTER

## Overcoming Barriers to Productivity and Prosperity | March 2021

### FEATURED RESEARCH

Paul Krugman famously remarked that “a country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.” But what leads to the massive discrepancies in output per worker between high- and low-income countries? In a recent Policy Research Talk, [Roberto N. Fattal Jaef](#) provided new evidence on this old question. Using a micro-to-macro approach, Fattal Jaef identified the impact of entry barriers and allocative distortions on productivity across a range of developing countries. In the typical country, removing both of these distortions could increase total factor productivity between 15 and 20 percent.

### Total Factor Productivity Gains from Removing Distortions



*This figure reports the gains in total factor productivity that would be achieved from removing both entry barriers and allocative distortions in a given country.*

[Video](#) | [Presentation](#) | Working Paper: [Entry Barriers, Idiosyncratic Distortions, and the Firm-Size Distribution](#)

### RESEARCH HIGHLIGHTS

#### WORKING PAPERS

✓ [Productivity Loss and Misallocation of Resources in Southeast Asia](#)

Francesca de Nicola, [Ha Nguyen](#), [Norman Loayza](#), *World Bank Policy Research Working Paper 9483*, November 2020

This paper examines within-sector resource misallocation in Indonesia, Malaysia, and Vietnam. Resource misallocation across firms within a sector is large. An efficient reallocation would yield considerable productivity gains—above 80 percent for Indonesia and around 20 to 30 percent for Malaysia and Vietnam. Private domestic firms and firms with higher productivity appear to face larger distortions that prevent them from expanding.

### ✓ [Malaysia's Economic Growth and Transition to High Income: An Application of the World Bank Long Term Growth Model \(LTGM\)](#)

Sharmila Devadas, Jorge Guzman, [Young Eun Kim](#), [Norman Loayza](#), [Steven Pennings](#), *World Bank Policy Research Working Paper 9278*, June 2020

This paper assesses long-term economic growth in Malaysia using the World Bank's Long-Term Growth Model. Under a business-as-usual baseline, GDP growth is expected to decline from 4.5 to 2.0 percent over the next three decades. However, with strong reforms—especially for human capital, female labor force participation, and total factor productivity—GDP growth would recover, reaching 3.6 percent by 2050.

## ■ JOURNAL ARTICLES

### ✓ [Sectoral Productivity Gaps and Aggregate Productivity](#)

[Rishabh Sinha](#), *B.E. Journal of Macroeconomics 21 (1): 37-71, 2021* | [Working Paper Version](#)

This paper assesses the aggregate effects of sectoral misallocation of labor as implied by productivity gaps. For some countries, the efficiency gains of eliminating distortions rival accumulated economic expansion over several years. However, on average across 87 countries in the sample the gains are meager and are not consequential in accounting for cross-country variation in incomes.

### ✓ [Is Resource Misallocation Leading To Productivity Gaps In Malaysia's Manufacturing Sector?](#)

Lay Lian Chuah, [Norman Loayza](#), [Ha Nguyen](#), *The Singapore Economic Review 65 (5): 1213-1235, May 2020* | [Working Paper Version](#)

This paper uses within-sector data from the Malaysian manufacturing censuses of 2005 and 2010 to estimate the country's productivity gains if all misallocation within industries is removed. The results suggest that the efficiency gap (the degree of misallocation) has narrowed but is still over 40 percent, which indicates substantial room for improvement in total factor productivity growth.

### ✓ [Size-dependent tax enforcement and compliance: Global evidence and aggregate implications](#)

[Pierre Bachas](#), [Roberto N. Fattal Jaef](#), [Anders Jensen](#), *Journal of Development Economics 140: 203-222, September 2019* | [Working Paper Version](#)

One specific driver of resource misallocation is size-dependent tax enforcement. Using average firm size in the United States as an instrument to rank industries by size in developing countries, data from the World Bank's [Enterprise Surveys](#) from 125,000 firms in 140 countries show that tax enforcement and compliance increases with firm size. When quantified in a general equilibrium model, removing size-dependent taxation would raise total factor productivity by 1-2 percent.

### ✓ [Productivity Growth: Patterns and Determinants across the World](#)

[Young Eun Kim, Norman Loayza, \*Economia\* 42 \(84\): 2019 | \[Working Paper Version\]\(#\)](#)

This extension of the World Bank's [Long-Term Growth Model](#) attempts to account for the drivers of productivity growth. Based on an extensive literature review, it organizes the main determinants of productivity in categories related to innovation, education, market efficiency, infrastructure, and institutions. Within each category, the paper selects the most important measurable variables, combines them in indexes, and examines their relationship with total factor productivity growth. In the most recent decade, market efficiency was the biggest contributor to variation in TFP growth in OECD countries, while education was the biggest in developing countries.

### ✓ [Entry and Exit, Multiproduct Firms, and Allocative Distortions](#)

[Roberto N. Fattal Jaef, \*American Economic Journal: Macroeconomics\* 10 \(2\): 86-112, April 2018 | \[Working Paper Version\]\(#\)](#)

Distortions that misallocate resources across firms, such as financial frictions, labor regulation, and size-dependent taxation, have been shown to have a detrimental effect on productivity. A less-studied effect of these same distortions is their implication for the dynamic choices of firms, such as entry, exit, and product creation decisions. This paper incorporates these dynamic margins of adjustment in the models studying the aggregate effects of misallocation and finds that they significantly magnify the welfare losses from allocative distortions.

### ✓ [Business Practices in Small Firms in Developing Countries](#)

[David McKenzie, Christopher Woodruff, \*Management Science\* 63 \(9\), July 2016 | \[Working Paper Version\]\(#\) | \[Development Impact Blog\]\(#\) | \[VoxEU Blog\]\(#\)](#)

A new survey tool is used to measure business practices in 20,000 small firms in Bangladesh, Chile, Ghana, Kenya, Mexico, Nigeria, and Sri Lanka. These business practices are shown to explain as much of the variation in firm survival, growth, and productivity as is the case for structured management practices in larger firms. Owners with higher human capital, children of entrepreneurs, and firms with employees tend to follow better business practices.

For more Policy Research Working Papers from the Development Research Group: [Web](#) | [Email Notifications](#)

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## UPCOMING EVENTS

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- **April 12, 2021:** Policy Research Talk: [Overuse and Underuse of Acute Healthcare: Evidence from Mali](#)
- **May 2021:** Policy Research Talk: [Data for Better Lives](#)
- **Spring 2022:** [21st Annual Conference on Land and Poverty: Institutions for Equity and Resilience](#)

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## RESEARCH BRIEFS

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### **Distributional Effects of International Trade: Misconceptions about Losses and Gains**

[Erhan Artuc, \*Research & Policy Brief\* 44, March 2021](#)

International trade increases efficiency but also redistributes income, thus creating winners and losers. To account for the total impact and calculate redistributive effects correctly and fully, the different channels of gains and losses must be measured precisely. This research brief shows that measuring the gains is often much more challenging than measuring the losses,

generating misconceptions and an overstatement of the adverse impacts of international trade. To assess the effects of trade shocks objectively, and to promote effective policy options, policy makers must be aware of the limitations in data and methodology surrounding the research on the distributional effects of international trade, and the misconceptions that ensue.

[Read the brief](#) | [More research briefs](#)

### **Five Ways that COVID-19 Diagnostics Can Save Lives: Prioritizing Uses of Tests to Maximize Cost-Effectiveness**

*Tristan Reed, William Waites, David Manheim, [Damien de Walque](#), Chiara Vallini, Roberta Gatti and, Timothy B. Hallett, Research & Policy Brief 43, February 2021*

This brief quantifies the cost-effectiveness of five alternative diagnostic use cases in terms of tests required per death averted. Across use cases, a single death can be averted by administering 940 to 8,838 tests, implying a large and positive return on investment in all use cases—even assuming a very low value for loss of life. That is, all five use cases pay for themselves many times over. When prevalence of SARS-CoV-2 is high, the most cost-effective uses of SARS-CoV-2 diagnostics seem to be clinical triage of patients, at-risk worker screening, and population surveillance. Test-trace-isolate programs and border screening are also worthwhile, although they are more resource intensive per death averted if done comprehensively. These latter two interventions become relatively more cost effective when prevalence is low and can stop the virus from entering a community completely. While governments should seek widespread deployment of tests in all five use cases, prioritizing them in this way is likely to maximize the cost-effectiveness of their use. As more contagious strains emerge, each use case will become more valuable than ever.

[Read the brief](#) | [More research briefs](#)

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## **SOCIAL MEDIA**

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### **World Development Report 2021: Data for Better Lives — Leveraging greater value from data to help the poor**

*Bob Cull, Vivien Foster, Dean Jolliffe, [Malarvizhi Veerappan](#) | Data Blog | March 24, 2021*

Data is a powerful weapon in the fight against poverty—one that can potentially transform the lives of poor people. But it's also a double-edged sword. New rules of the road are called for—a social contract for data—to get more value out of data while protecting people against harm and ensuring access and representation.

[Read the blog](#) | [World Development Report 2021: Data for Better Lives](#)

### **Introducing our newly hired researchers**

*David McKenzie, Florence Kondylis, [Berk Özler](#) | Development Impact | March 2021*

Over the past few years, two research departments in the Development Economics Vice Presidency (DECVP), namely the Development Research Group ([DRG](#)) and the Development Impact Evaluation unit ([DIME](#)) have recruited 24 researchers. We will be running a three-part series to introduce them to our colleagues in the Bank and the rest of the larger development community. We have grouped them by fields and will introduce eight of them each day between today and Thursday. We hope that these short blurbs will pique the interest of our WB colleagues to reach out to these junior researchers to include them in their important work. Equally, we hope that seminar organizers at academic institutions and other development organizations will invite them for talks – virtual for now and, hopefully, in person soon.

Read blogs: [Part 1](#) | [Part 2](#) | [Part 3](#)

### **Improving management practices through individual and group consulting: Evidence from Colombia**

*Leonardo Iacovone, William Maloney, [David McKenzie](#) | VoxDev | March 15, 2021*

*By leveraging peer-learning effects, group-based consulting can be cheaper and more effective than individual interventions in improving SME performance*

There are large differences in the management practices used by firms within and across countries (Bloom and Van Reenen 2007). These differences are strongly correlated with productivity, with Bloom et al. (2016) estimating that differences in management can account for 30% of cross-country productivity differences. An experiment with 17 textile firms in India provides a proof-of-concept that intensive individualised consulting can deliver lasting improvements in the practices of badly managed firms, resulting in productivity improvements of 17% (Bloom et al. 2013, 2020). However, this intervention was implemented by an international consulting company under close supervision from researchers, and had a market value of US\$250,000 per treated firm. Such high costs might be prohibitive for many small and medium-sized enterprises (SMEs) to finance themselves, and also for governments seeking to scale up such interventions to assist large numbers of firms. In a [new paper](#) (Iacovone et al. forthcoming), we partnered with the Colombian government to conduct an experiment to test two competing approaches to scaling up management improvements: individualised consulting services delivered by local consultants, and a group-based approach aimed at lowering the cost of delivery and leveraging group-learning dynamics.

[Read the article](#)

## **Getting a sharper picture of the COVID-19 pandemic: how seroprevalence surveys are helping 7 Colombian cities**

*Gabriel Demombynes, [Damien De Walque](#), Paul Gubbins, Jeremy Veillard | Let's Talk Development | March 15, 2021*

Seroprevalence surveys provide a much more accurate picture of true infections. They involve testing sample populations for antibodies to COVID-19 so that previous infections can be more accurately detected. In Spain, the ENE-COVID19 study carried out in April and May 2020 found that for every reported case, there were actually 10 infections in the population. In Karnataka, India, where the number of reported infection cases amounted to just 0.48% of the population, a study carried out between June and August 2020 found that in fact, 39.6% of the population had been previously infected.

[Read the blog](#)

## **An adversarial or “Long and Squiggly” test of the plausibility of parallel trends in difference-in-differences analysis**

*[David McKenzie](#) | Development Impact | March 10, 2021*

Don't worry, this is not a complicated post on yet another of the expanding set of theory papers on difference-in-differences. Instead, I want to offer my heuristic thoughts on when I find graphs illustrating parallel trends to be more or less informative, and on what, in my mind, makes the parallel trends assumption more plausible. If you take anything from this post, it should be:

- Plot the raw treatment and control series, not just their difference; and
- The longer and squigglier your pre-treatment trends, the more plausible I find the parallel trends assumption.

[Read the blog](#)

## **The boom in corporate borrowing in East Asia and Latin America**

*Facundo Abraham, Juan Jose Cortina Lorente, [Sergio Schmukler](#) | Let's Talk Development | March 9, 2021*

Following the global financial crisis, emerging market firms significantly expanded the amount of financing raised in bond markets. Many of the current discussions in academic and policy circles focus on international bond financing. They argue that this expansion has been driven by an increased appetite for emerging market bonds by foreign investors. Whereas the growth in

international bond issuance is well documented, not much is known about the issuance of domestic bonds by emerging market borrowers. In a new brief, we provide a summary of recent research on the role of domestic and foreign bond markets in the rise of emerging market corporate debt after the global financial crisis of 2008-2009. We focus on East Asia and Latin America, which together accounted for about 90 percent of the total amount raised in corporate bonds by emerging economies between 2010 and 2019.

[Read the blog](#) | [Read the brief](#)

## **Ready, Set, Bunch!**

[Pierre Bachas](#), [Florence Kondylis](#), [John Loeser](#) | *Development Impact* | March 8, 2021

With the growing use of administrative data in economics, it is commonly observed that individuals or firms tend to locate at key policy thresholds — this behavior is referred to as “bunching”. Examples include firms reporting earnings just below thresholds above which taxes or costly regulations kick in, or individuals working hours just below thresholds above which they would be classified as full-time.

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## **Dynamics of economics seminars: more questions than answers?**

[Berk Özler](#) | *Impact Evaluation* | March 1, 2021

The NYT coverage of the new working paper, titled “Gender and the Dynamics of Economics Seminars,” (Dupas et al. 2021) got the expected Twitter outrage. I’d be comfortable speculating that most people did not read the paper carefully and, instead, relied on the NYT’s scant coverage of the paper, which, frankly, did not enlighten us more than if you simply read the abstract (it quickly moved on to the rest of the literature on gender discrimination in economics).

That we have a huge problem in economics is not in doubt, but the article and the social media takes don’t do justice to the findings of this novel paper. The findings in the paper are much more nuanced than the impression you would have gotten from the coverage, but it requires actually going through the evidence presented in the paper. Fortunately, Development Impact is here with an earnest attempt. So, please spend the next 15 minutes with me to look at the evidence presented in the paper a little more closely...

[Read the blog](#)

## **On folklore and ‘Folklore’ (QJE, forthcoming): Forging dialogue, reconciling trade-offs**

[Michael Woolcock](#) | *Development Impact*, February 23, 2021

*A sociologist discusses what to make of the new QJE paper: Folklore by Stelios Michalopoulos and Melanie Meng Xue*

Economics, of all disciplines, should be astutely attuned to trade-offs, in this instance of what is gained and what is lost when complex topics are addressed from a single standpoint, or when methodological ‘depth’ and ‘breadth’ yield rather different insights, implications, and applications. This is especially salient for issues intrinsically located at disciplinary boundaries, where monopolies in the production and distribution of ideas can be as inefficient as they are in goods and services ([Rao and Woolcock 2007](#)). The real success of “Folklore” will be expanding, not constraining, the market for ideas on folklore. I welcome its publication for the great intra-disciplinary paper it is, but different kind of work will be needed to forge broader dialogue. To that end, and for that task, it may need a longer title.

[Read the blog](#)

## **Encouraging agricultural technology adoption through autonomy: Evidence from Mexico**

Carolina Corral, [Xavier Giné](#), Aprajit Mahajan, Enrique Seira | Vox Dev | February 8, 2021

*While farming practices were not initially enhanced, low-income farmers in Mexico with autonomy substantially improved two years post-intervention*

The Green Revolution of the 1960s introduced high-yielding crop varieties, chemical fertiliser, pesticides, and other modern agricultural practices to developing countries. However, even decades after their introduction, take up of improved inputs and practices has been uneven (Foster and Rosenzweig 2010). Traditional farming practices remain widespread and yields for smallholder farmers in the developing world remain low.

[Read the article](#)

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