INCLUSIVE GLOBALIZATION & POLICY

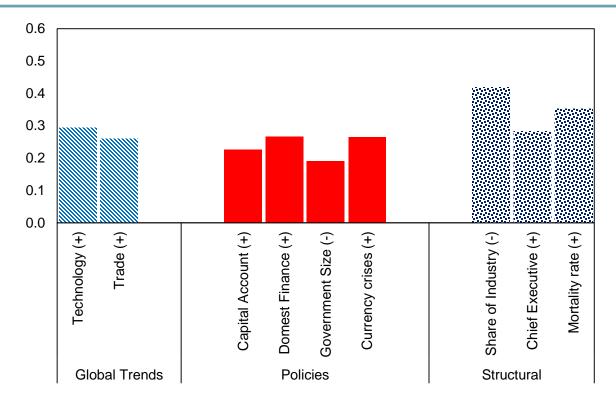**Jonathan D. Ostry**

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Challenges for a Better Globalization

The Brookings Institution
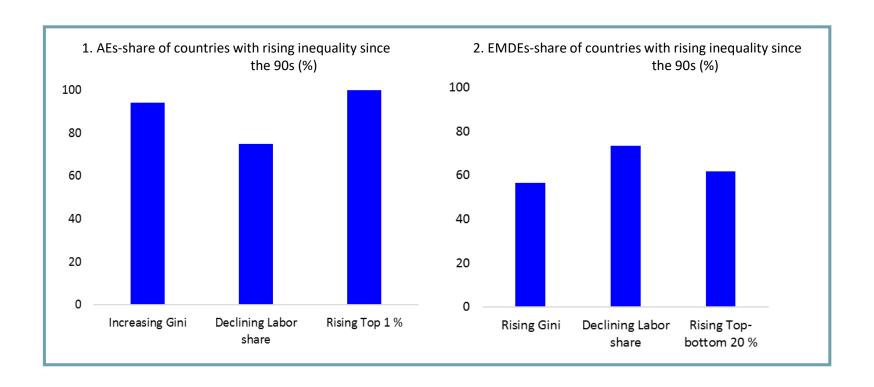
Washington, DC, May 25, 2018

POLICIES ARE A KEY DRIVER OF INEQUALITY

Determinants of the Gini measure of inequality based on a panel regression (90 countries; 5-year averages over 1970-2015 period) estimated using weighted average least squares. Each bar shows the percentage point increase in the Gini from a 1 standard deviation increase in the variable.
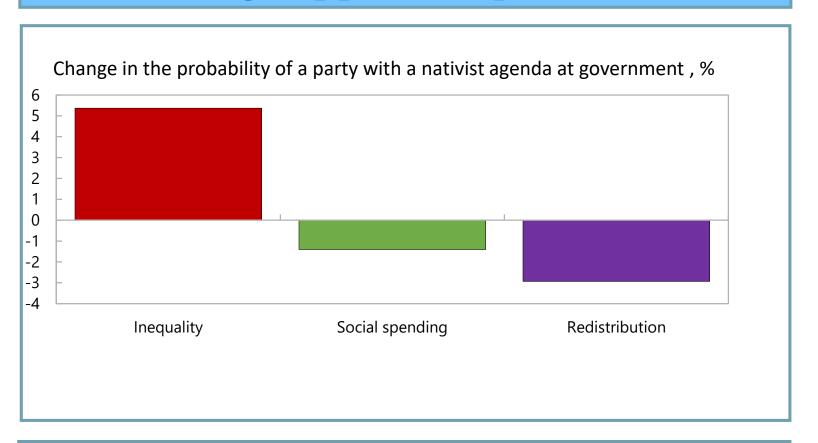
Global trends: 'Technology' is share of ICT capital in total capital stock; 'Trade' is openness variable from Penn World Tables. Policies: 'Capital Account Liberalization' is measured using the Chinn-Ito Index. 'Domestic Financial Reform' is measured as in Ostry et al (2009). 'Government Size' is share of government in GDP; note (-) impact: higher government size reduces inequality. 'Currency crisis' is from Laeven and Valencia; Structural: 'share of industry' is manufacturing value added in GDP; 'Chief Executive' indicates whether govt. head is a military officer; 'mortality rate' (commonly included in inequality regressions). Source: Ostry, Furceri & Loungani (2016).

Globalization Rising; Inclusion Falling

1. AEs-share of countries with rising inequality since the 90s (%)

2. EMDEs-share of countries with rising inequality since the 90s (%)

Increased inequality makes growth more fragile (Berg & Ostry, 2011; Ostry et al., 2014)

Fuelling support for protectionism
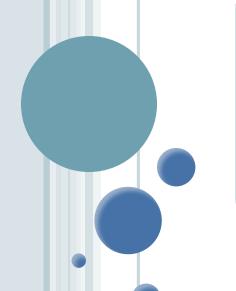
Change in the probability of a party with a nativist agenda at government , %

Note: estimates based on a panel regression framework relating inequality (social spending, redistribution) with the probability of a party with a nativist agenda at government for a sample of 164 countries over the period 1990-2012. The effects of inequality (social spending, redistribution) are based on their interquartile differences and panel regression coefficients. Social spending=education and health spending as share of GDP; Redistribution=difference between market and net Gini.

RELATIONSHIP OF FINDINGS TO ONGOING DEBATES

- Great concern has been voiced about inequality recently -- impact on social cohesion; political capture by elites, etc.
  - Our finding: there is a direct **economic cost** to inequality -- it leads to lower and less durable growth

- Retreat from globalization (Brexit, Trump etc.)
  - Concerns about distributional effects of trade
  - Protests against migrants
  - Our finding: the effects of financial globalization should be part of the discussion -- it contributes as much to inequality as trade; it lowers workers' bargaining power and income share

  - In fact, financial globalization can make it difficult to mitigate distributional effects of international trade - it leads to a race to the bottom in taxation, eroding revenues needed for social benefits

EFFICIENCY-EQUITY TRADEOFFS: FINANCIAL GLOBALIZATION

FINANCIAL GLOBALIZATION: TWO PUZZLES

○ **Financial globalization works well in theory, not so well in practice**

Theory predicts output (efficiency) gains from both trade and financial globalization, but gains from latter have proven difficult to demonstrate.

❑ Stiglitz: "Preconditions to make financial globalization work are lacking in many countries."

❑ Rodrik: "The association between capital account convertibility and economic growth is weak at best…there is a strong association between financial globalization and financial crises over time"

❑ Krugman (May 2017): "financial globalization hasn't been the force for good that trade has been"

❑ Martin Wolf (2004): "the gains [from financial globalization] have been questionable and the costs of crises enormous."

❑ Eichengreen et al. (2001): evidence of a positive association between capital account liberalization and growth is "decidedly fragile."

○ **Enormous literature on impact of trade on inequality, while financial globalization gets a free pass.**

Financial globalization can affect inequality in theory; shouldn't we look at whether it does so in practice?

CONTRIBUTIONS

We search for output effects: giving theory a chance

- Use both de jure and de facto measures of financial globalization
  - Large changes in de jure measures = policy changes
  - Supplement with information on capital flows (de facto measure)

- Use sectoral as well as aggregate data, since causal effects hard to establish in macro data
  - Use of country-time fixed effects allows for cleaner identification of effects of financial globalization
  - Better identification of channels through which effects of financial globalization operate

- Trace out evolution of output in aftermath of major financial globalization episodes rather than look for permanent growth effects (Henry 2007).

We don't turn a blind eye to distributional effects: taking the theory seriously

- Impact on Gini coefficient (aggregate data) and labor shares (aggregate and sectoral data)

Bottom-line: Some evidence of output effects (better identification than in previous work helps), but also strong distributional effects.

IDENTIFICATION OF POLICY-DRIVEN GLOBALIZATION EPISODES

- Policy restrictions on cross-border transactions are reported in the *IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)* database.

- Information in *AREAER* is combined by Chinn and Ito to construct an index of capital account restrictions.

- Examining behavior of output (or inequality) before and after removal of major policy restrictions requires information on when restrictions were lifted; difficult to do for large sample of countries.

- We infer timing of major policy changes by looking at large changes in the Chinn-Ito index (Kaopen)
  - Assume liberalization takes place when, for a given country at a given time, the annual change in the Kaopen indicator exceeds by two standard deviations the average annual change over all observations.

→ This criterion identifies 224 episodes (over 1970-2010)–the majority occurring in the early 90s (when inequality started to increase).

→ Examples: several EU countries in the early 1990s; India and Brazil in the mid- and late 1990s.

EMPIRICAL STRATEGY—MACRO LEVEL DATA

Baseline:

$$g_{it} = a_i + \gamma_t + \sum_{j=0}^{l} \delta_k D_{i,t-k} + \sum_{k=0}^{l} \vartheta_k X_{i,t-k} + \varepsilon_{it}$$

Role of country-specific factors:

$$g_{it} = a_i + \gamma_t + \sum_{j=0}^{l} \vartheta_j X_{i,t-j} + \sum_{j=0}^{l} \delta_j^- D_{i,t-j} G(z_{it}) + \sum_{j=0}^{l} \delta_j^+ D_{i,t-j}(1 - G(z_{it})) + \varepsilon_{it}$$

g = change in log output (Gini);

D = liberalization episode;

X = baseline: current and lagged reforms in trade, current account, product and labor market; robustness checks: baseline + growth expectations + other controls.

G= smooth transition function (G = 1 ⇔ (extremely) low financial liberalization/inclusion, crises).

Estimates based on OLS and IV (liberalization in trading partners and initial degree of openness) for 149 countries for the period

EMPIRICAL STRATEGY—SECTORAL LEVEL DATA

Baseline: $g_{jit} = a_{ij} + \gamma_{it} + \rho_{jt} + \sum_{k=0}^{l} \delta_k S_j D_{i,t-k} + \varepsilon_{jit}$

i (country); j(sector); t (time).

g = change in log output (labor share of income);
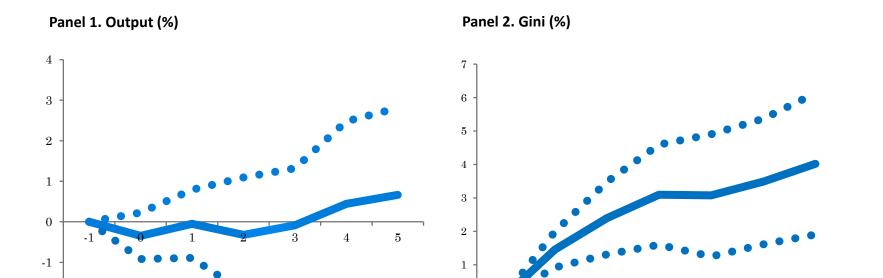
D = liberalization episode;

 S = external financial dependence (EFD); natural-layoff rate (NL); EOS between capital and labor.

Theoretical predictions:

(i) output (labor share) effects are larger for industries with higher EFD—*demand for external funds;*

(ii) labor share effects are larger for industries with higher NL—*bargaining power;*

(iii) labor share effects are larger for industries with EOS>1—*cost of capital.*

Estimates based on OLS using sectoral data for 23 AEs, 25 industries, 1975-2010.
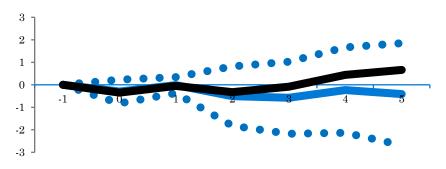
Insignificant output gains but significant increases in inequality
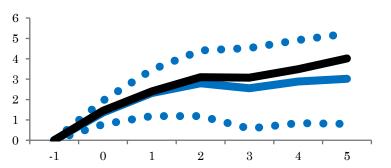
Panel 1. Output (%)

Panel 2. Gini (%)

Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The x-axis denotes time. t=0 is the year of the reform.
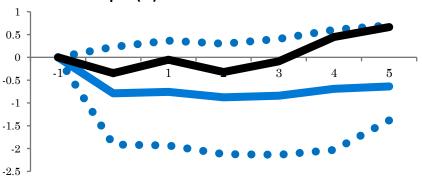
...the results are robust to endogeneity checks

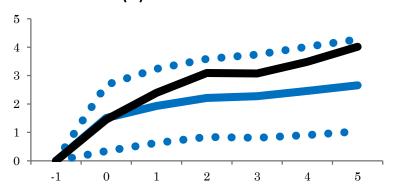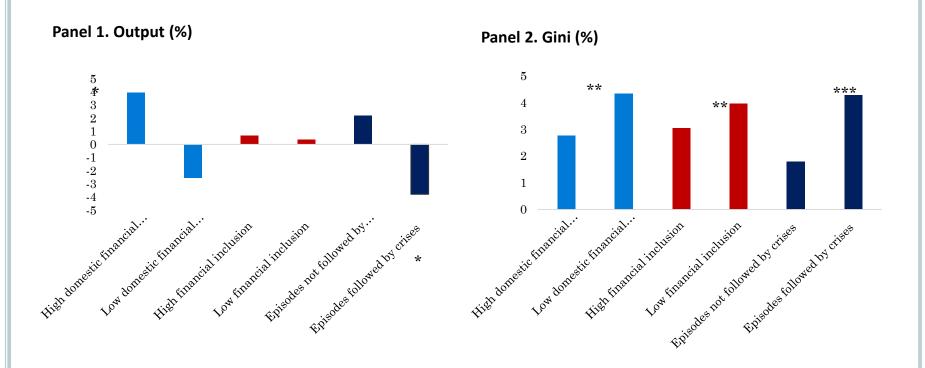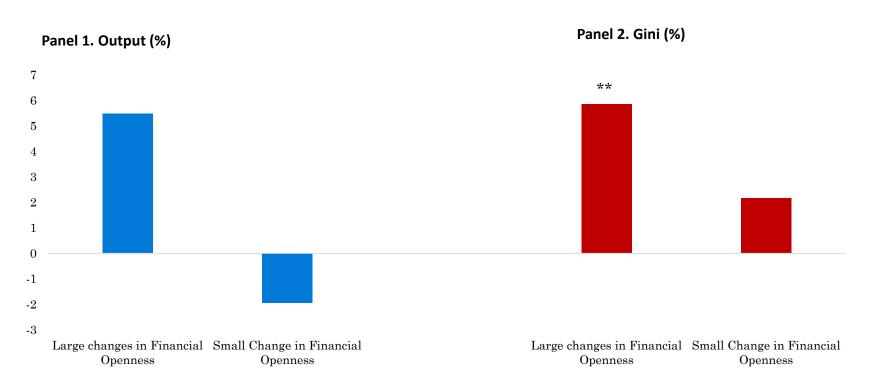**Panel 1. Output (%)—controlling for growth expectations**

Panel 2. Gini (%)—controlling for growth expectations

Panel 3. Output (%)—IV

Panel 4. Gini (%)—IV

Note: The solid lines indicate the response of output (inequality) to a capital account liberalization episode; dotted lines correspond to 90 percent confidence bands. The solid black lines denote the baseline effect.

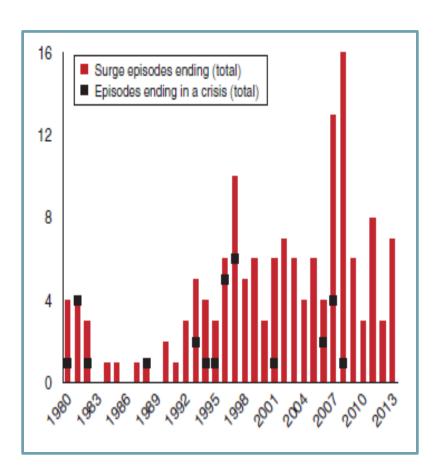# But output & distributional effects depend on institutions

Panel 1. Output (%)

Panel 2. Gini (%)

Note: Medium-term effects (that is, after five years of the reform). ***,**,* denote significance at 1 percent, 5 percent and 10 percent, respectively.
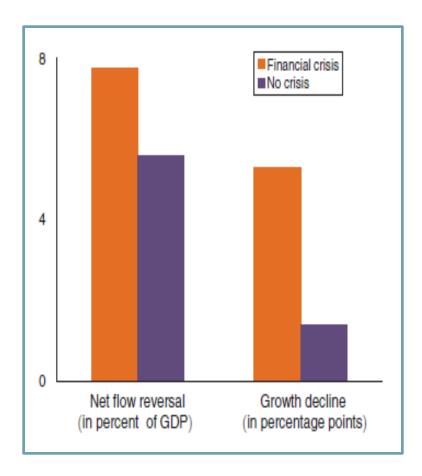
… and on the extent of capital flows (de facto measure)

Panel 1. Output (%)

Panel 2. Gini (%)

Note: Medium-term effects (that is, after five years of the reform). ***,**,* denote significance at 1 percent, 5 percent and 10 percent, respectively. Blue (red) bars denote the medium-term response (that is, five years after the reform) of output (inequality). Flows defined as the cumulative 5-year change in total asset and liabilities as percent of GDP after the reform.
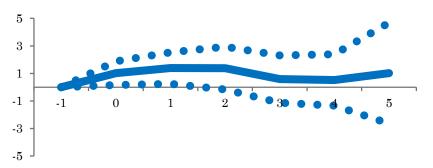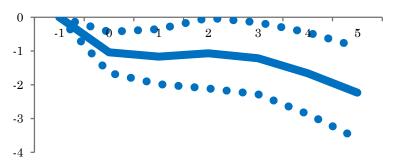
Capital Surges and financial crises

The panel on the left shows the total number of surges ending in a given year and those that end in a financial crisis. The panel on the right compares capital flow reversal and growth between surges that end in a crisis and those that do not. The analysis is based on data for 53 emerging market economies over 1980-2014. Source: Ghosh, Ostry and Qureshi (AER P&P, 2016)

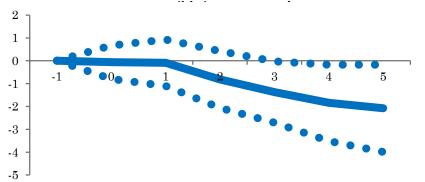# Sectorally, short-term output gains, significant decline in labor share

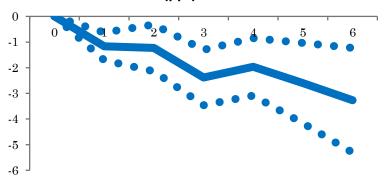**Panel 1. Output (%)—external financial dependence**

Panel 2. Labor share (ppt)—external financial dependence

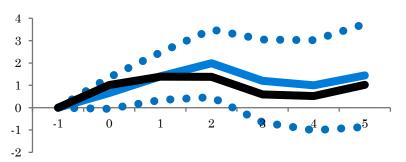**Panel 3. Labor share (ppt)—natural layoff rate**
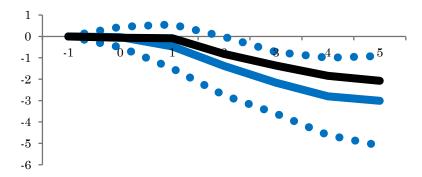
Panel 4. Labor share (ppt)—EOS >1

Note: Solid line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 75th percentile) and a sector with a high external financial dependence/layoff rate/elasticity of substitution (at the 25th percentile).

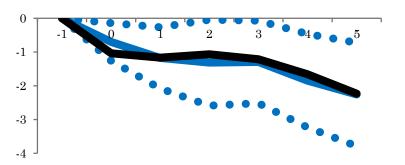# Results robust to controlling for domestic finance reforms…(and trade reforms, and technology)

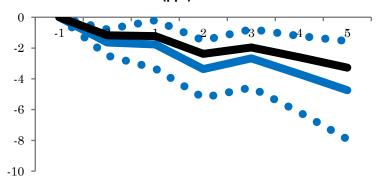**Panel 1. Output (%)—external financial dependence**

Panel 2. Labor share (ppt)—external financial dependence

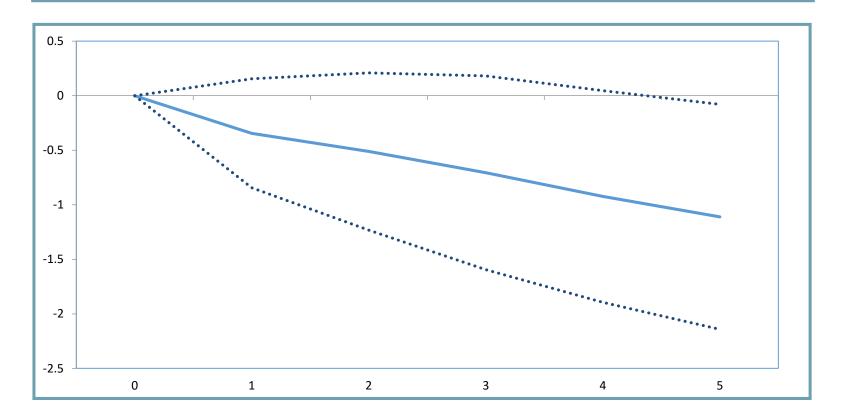**Panel 3. Labor share (ppt)—natural layoff rate**

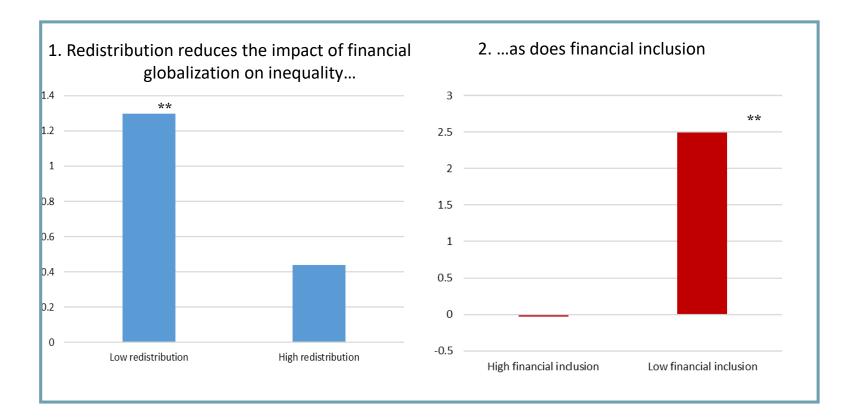**Panel 4. Labor share (ppt)—EOS >1**

Note: Solid blue line denotes the differential effect of capital account liberalization episodes between a sector with a high external financial dependence/layoff rate/elasticity of substitution and a sector with a high external financial dependence/layoff rate/elasticity of substitution). Black lines denote baseline effects.

Less redistribution, even though needed more

Note: redistribution = difference between market Gini and net Gini. Vertical axis measure percent change. Estimated impact on growth following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years after the episode. See Furceri, Loungani and Ostry (2017) for details.

Sharing the benefits helps

1. Redistribution reduces the impact of financial globalization on inequality…

2. …as does financial inclusion

Note: estimated impact on net Gini following a capital account liberalization episode. Liberalization is measured using the Chinn-Ito index. Estimates are based on an autoregressive distributed lag model. The horizontal scale is in years before or after the episode. The vertical scale shows percent change. ***, **, * denote significance at 1 percent, 5 percent and 10 percent, respectively. See Furceri, Loungani and Ostry (2017) for details.

THE BROAD MESSAGE...

- High inequality and low & fragile growth are two sides of the same coin--a dangerous gamble therefore to 'go for growth' and assume equity will take care of itself

- Fear of using fiscal redistribution is overblown. In fact, on average in the data, redistribution is a pro-growth policy through the greater equality it engenders. The 'leak' in Arthur Okun's bucket has not been large in practice

- Evidence on financial globalization
  - Costs in terms of increased volatility are high
  - Output benefits elusive and shared unevenly
  - Other effects: a race to the bottom on taxes? Reduced redistribution?

- Be cognizant of growth-equity tradeoffs in macro & structural policies
  - How can we design policies so growth benefits go up AND equity costs go down?
  - Use of complementary policies: "trampoline" policies–such as job retraining and assistance with search–to help workers bounce back from job displacement
  - Redistribution: greater reliance on wealth and property taxes, more progressive income taxation, and better targeting of social benefits

- On macro policies:
  - Case for paying down public debt is weak–living with debt is a better policy when fiscal space ample