**Discussion of** 

# **Trade Wars, Currency Wars**

by Stephen Auray, Mick Devereux, and Aurelien Eyquem

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June 1, 2021 ABFER

### IMF STAFF DISCUSSION NOTE

### A Proposal to End the COVID-19 Pandemic

### Ruchir Agarwal, Gita Gopinath

Urgent steps are needed to arrest the rising human toll and economic strain from the COVID-19 pandemic that are exacerbating already-diverging recoveries. Pandemic policy is also economic policy as there is no durable end to the economic crisis without an end to the health crisis. Building on existing initiatives, this paper proposes pragmatic actions at the national and multilateral level to expeditiously defeat the pandemic. The proposal targets: (1) vaccinating at least 40 percent of the population in all countries by the end of 2021 and at least 60 percent by the first half of 2022, (2) tracking and insuring against downside risks, and (3) ensuring widespread testing and tracing, maintaining adequate stocks of therapeutics, and enforcing public health measures in places where vaccine coverage is low. The benefits of such measures at about \$9 trillion far outweigh the costs which are estimated to be around \$50 billion—of which \$35 billion should be paid by grants from donors and the residual by national governments potentially with the support of concessional financing from bilateral and multilateral agencies. The grant funding gap identified by the Access to COVID-19 Tools (ACT) Accelerator amounts to about \$22 billion, which the G20 recognizes as important to address. This leaves an estimated \$13 billion in additional grant contributions needed to finance our proposal. Importantly, the strategy requires global cooperation to secure upfront financing, upfront vaccine donations, and at-risk investment to insure against downside risks for the world.

### Trade Wars, Currency Wars

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IMFC5 Conference June 4, 2020 VERY PRELIMINARY

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### Basic setup

- Two country model, Home (Foreign) population n, (1 n)
- Preferences are

$$U = \log C_t - \chi \frac{1}{2} H_t^2$$

We assume no financial market trading across countries.

Home country budget constraint is

$$P_{h,t}C_{h,t} + (1+\tau_t)S_tP_{f,t}^*C_{f,t} = W_tH_t + \Pi_t + TR_t$$

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 $\triangleright$   $\tau_t$  is tariff rate

### **Economic Policy**

 Monetary policy may be used to either target inflation rates or exchange rates.

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- Trade policy may be used to levy tariffs on imports
- Fiscal policy may be used to subsidize monopoly firms.
- Policy without commitment
  - Policymaker takes future policy as given

## **Outline of my discussion**

- Summary: three policies and three key takeaways
- Background of my discussion: 2003, 2008, 2010, 2020
- Questions and comments

## **Three policies**

- Trade policy
- Monetary policy
- Fiscal policy

### Three key takeaways

- Positive economics: intratemporal and intertemporal relative prices (tariff/subsidy and inflation/interest rates)
- Normative economics: importance of interaction among policies (e.g. super-Rogoff result)
- Realism: asymmetry among countries, as in exchange rate targeting and dominant currency pricing (related to exorbitant privilege?)



Journal of INTERNATIONAL ECONOMICS

Journal of International Economics 60 (2003) 471–500

www.elsevier.com/locate/econbase

## Spurious welfare reversals in international business cycle models

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Received 22 October 1999; received in revised form 19 December 2000; accepted 1 November 2001





Journal of International Economics 61 (2003) 385-396

www.elsevier.com/locate/econbase

### Patience, persistence, and welfare costs of incomplete markets in open economies

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Received 24 October 2002; received in revised form 18 November 2002; accepted 25 November 2002

THE KOREAN ECONOMIC REVIEW Volume 24, Number 1, Summer 2008

### **RELATIVE PRICE DISTORTION AND OPTIMAL MONETARY POLICY IN OPEN ECONOMIES**

### JINILL KIM\* · ANDREW T. LEVIN\* · TACK YUN\*

This paper provides a closed-form solution for optimal monetary policy in a two-country model with Calvo-type sticky prices. Initial price dispersion makes it suboptimal to completely stabilize the producer price index, and the optimal policy would entail a price-level targeting. The solution also indicates that the isomorphism of optimal policy rules between closed and open economy breaks down unless the utility function is logarithmic in consumption.

### International Monetary and Fiscal Coordination in a Liquidity Trap by David Cook and Michael Devereux

Comments by Dale Henderson



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## **Questions and comments**

- How to compare across models?
  Steady states in Table 1
  Welfare analysis and the zero<sup>th</sup> order
- What about commitment for monetary policy?
  - Trade policy commits, using a constant tariff.
  - Trade policy is harder to change.
    - However, what about independent CB?
      - Stabilization bias as well as inflation bias
- What about international financial markets?

#### Table 1: Currency wars

Variable	Non-cooperative	Cooperative	Non-coop/Subsidy	Coop/Subsidy
C	0.291	0.287	0.328	0.339
$C^*$	0.291	0.287	0.328	0.339
$Y_h$	0.437	0.460	0.554	0.555
$Y_f$	0.437	0.460	0.554	0.555
Ŝ	1.00	1.00	1.00	1.00
$\pi_h$	1.014	1.036	0.973	1.00
$\pi_f^*$	1.014	1.036	0.973	1.00
$\dot{U}$	-1.651	-1.699	-1.654	-1.604

Table showing equilibrium of Non-cooperative and Cooperative Monetary Policy, with and without offsetting subsidies for monopoly pricing