

200 YEARS  
*since 1816*



OESTERREICHISCHE NATIONALBANK  
EUROSYSTEM

# Discussion of Lewis&De Schryder and Kireyev&Leonidov

*by Julia Wörz*

**Workshop TASK FORCE ON GLOBAL TRADE**

Paris, June 20, 2016

Foreign Research Division

[www.oenb.at](http://www.oenb.at)

## **John Lewis & Selien De Schryder (BoE): “Export dynamics since the Great Trade Collapse: a cross-country analysis”**

Highly needed paper: mixes simple ingredients carefully to construct appropriate proxies for explaining the great trade collapse

- Findings
- Elements
- Possible extensions
- Unclear points

## Lewis & De Schryder: Findings

- Great trade collapse (GTC) is a temporary phenomenon, does not indicate structural shift to lower trade elasticity
- „Unexplained“ part of GTC (magnitude) can be explained by unobserved common factors among countries, such as trade protectionism, credit constraints, uncertainty

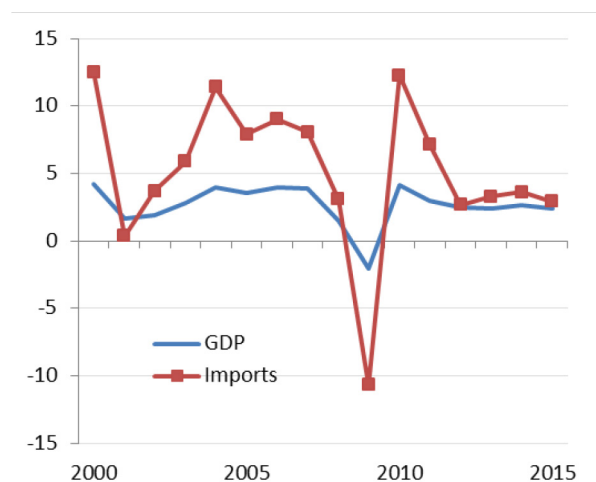
## Lewis & De Schryder: Elements

- Proxies for main factors determining export performance : foreign demand, structural shifts in global demand, price competitiveness split into unit labor costs and nominal effective exchange rate
- Panel ECM, PMG estimator with CCE (common external effects)

## Lewis & De Schryder: Possible extensions

- Estimation stops in 2011, thus insights about the GTC, but not about current trade weakness
- Coefficients estimated over period 1984-2008 without time variation, hence this average may not (yet) spot a structural change that occurred much prior to 2009

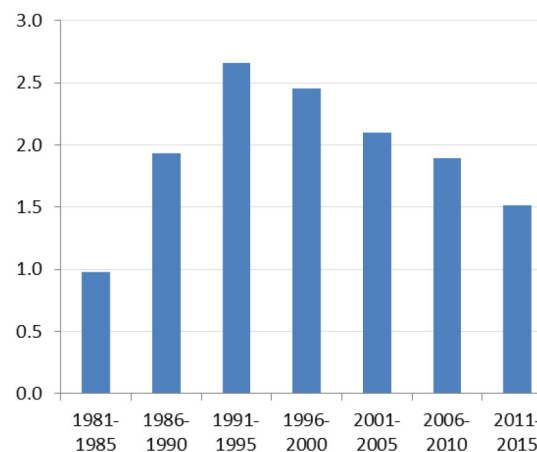
Chart 1.4 TFGT Report: Global imports and GDP growth



Source: IMF WEO.

Notes: Imports of goods and services. Global GDP is aggregate at market exchange rates. The last observation refers to 2015.

Chart 1.3 TFGT Report: Ratio of global import growth to global GDP growth



## Lewis & De Schryder: Possible extensions

- Extend to EMEs: these countries may experience more structural change compared to AEs → not trivial given tedious construction of proxies
- Shed light into unobserved common correlated effects → this would be a second paper
- GVC trade → but this would be an entirely different paper

## Lewis & De Schryder: Unclear points

- Data sources not always indicated
- Trade-weighted world output / GDP growth ( $Y^*$ ) – is this the foreign demand potential?
- Conditional forecasts:
  - Unwind previous shocks – is this the adjustment parameter?
  - Relative performance – measured relative to what: country specific export potential (=forecast value) or sample average
  - “Best performers” – best in terms of highest export growth? But not best in terms of meeting potential (i.e. minimal forecast error)

## **Alexei Kireyev (IMF) and Andrei Leonidov (Lebedev Institute) : “Can Network Effects and Counter-Shock Policies Weaken International Trade”**

Novel and detailed analysis of shock propagation highlighting network effects

- Findings
- Elements
- Possible extensions
- Unclear points



## Kireyev & Leonidov: Findings

- Direct and indirect effects of a shock differ depending on where the shock originates and who are the trading partners
- More developed and more open countries propagate shocks more strongly, less developed and especially commodity exporters often block shocks
- Regardless of the country of shock origin, some countries are always more strongly affected (i.e. Hong Kong, Kyrgyz Republic)

## Kireyev & Leonidov: Elements

- Import demand functions: needed to assess the reaction of a country to a foreign shock (pass-through coefficients), very detailed estimations (different specifications, different lags, nominal and real term, for each country)
- Matrix of export-import-links / weights / spatial correlation
- Susceptibility to shocks is determined by exposure to origin country AND trade elasticity
- Network algorithm

## Kireyev & Leonidov: Possible extensions

- Add overview: which origin countries are responsible for the largest repercussions across global trading system in case of a shock
- Assess the extent of substitution / trade diversion that follows in reaction to a shock in one specific country
- Account for the crucial role of final demand vs demand for intermediates / position and participation in global production networks → as before, this would be an entirely different paper

## Kireyev & Leonidov: Unclear points

- Discussion of BoP-balances misleading, as focus is on trade only as shock transmission channel
- Similar unclear if cointegration framework is necessary and used
- “export” vs “import” shock: does this refer to direct vs indirect effects?  
Wouldn't they necessarily have to be aggregated?
- How are the spillovers computed? There is no VAR, hence no IRFs
- What exactly is  $W$  ( $w_{ij}$ ): share of  $j$  (=shock origin) in  $i$ 's exports (=potential amplifier, absorber, blocker; = trade weight) \*  $\beta_i$  (=import elasticity to exports)

## Kireyev & Leonidov: Unclear points

- Definition of shock diffusion:
  - $\beta_1 > 1$  ... amplifying country  $\rightarrow$  ok
  - $0 < \beta_1 \leq 1$  ... absorbing country  $\rightarrow$  dampening?
  - $\beta_1 \leq 0$  ... blocking country  $\rightarrow$  ok only if  $\beta_1 = 0$ , otherwise inverting!
- Can you really capture spillins and spillbacks by adding up effects of shock transmission sequentially?
- Conclusion about shock reducing policies' impact ad hoc