



BANK FOR INTERNATIONAL SETTLEMENTS

Protectionism in international production networks

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Introduction

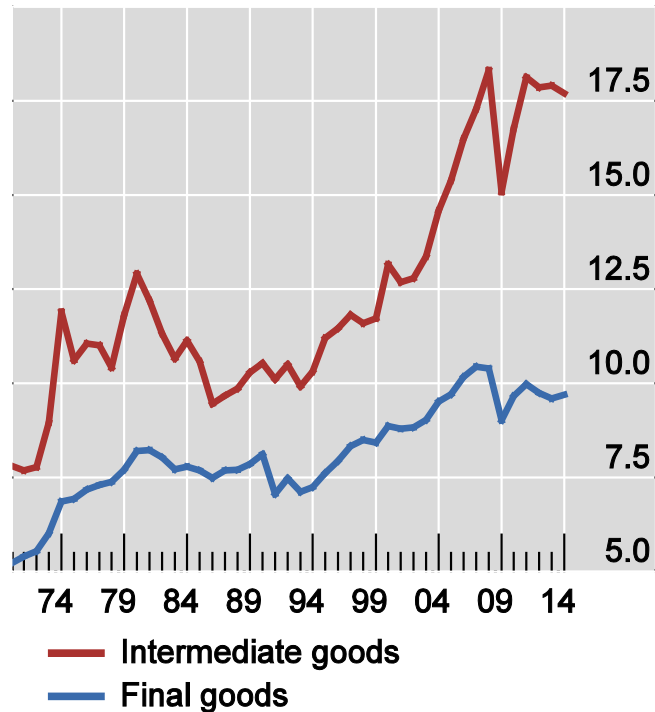
- Political events (Brexit, US elections) have brought protectionism to the fore, also endangering Global Value Chains (GVCs).
 - **is this of policy interest to central banks?**
 - **how large are direct impact and spillovers?**
- Will draw on:
 - BIS, 87th Annual Report, 2016/17; Auer, Borio and Filardo “The globalisation of inflation: the growing importance of global value chains” BIS WP 602; Auer, Levchenko, and Sauré “International inflation spillovers through input linkages” BIS WP No 623
 - a quantification based ongoing work



ICT advances and opening of EMEs led to growing GVCs

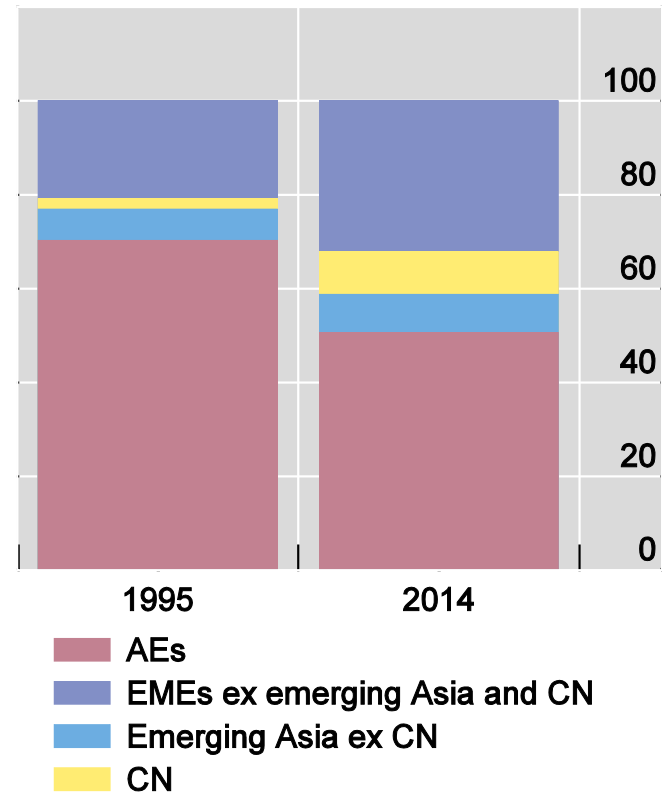
Global imports of intermediate and final goods and services

Percentage of GDP



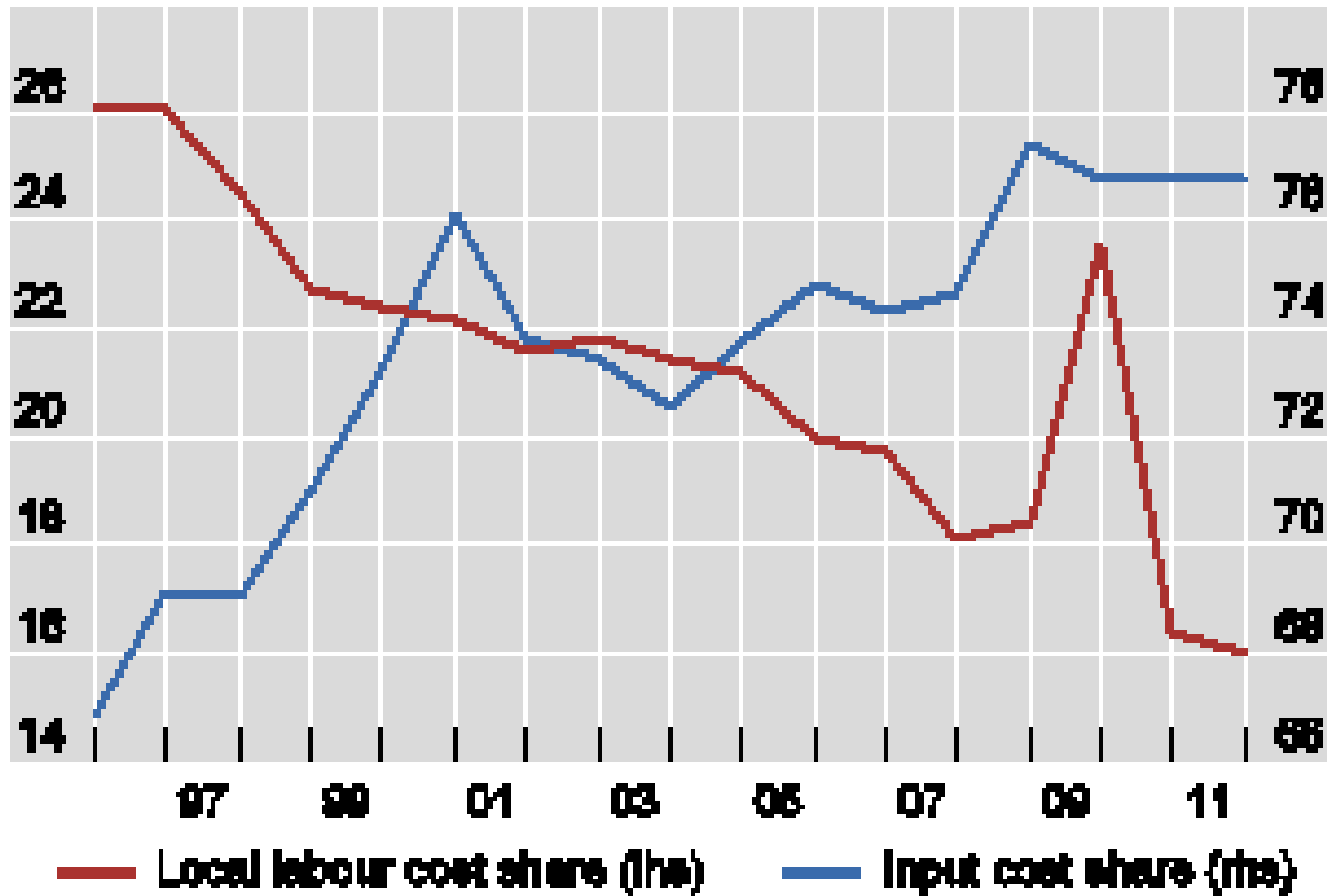
Geography of GVCs²

Share of intermediate imports by origin, %

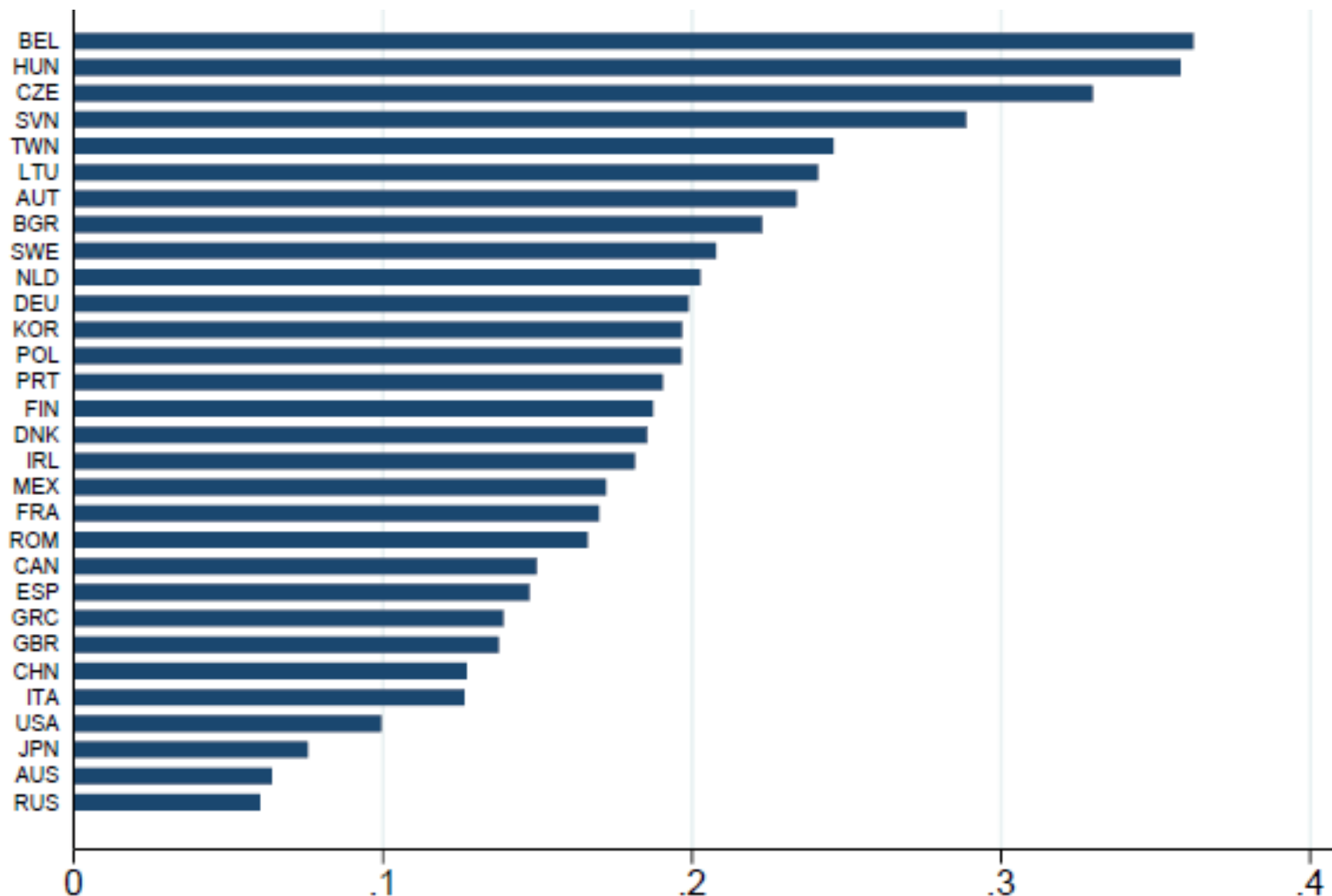


Input use has increased tremendously

Point in case is German car industry:



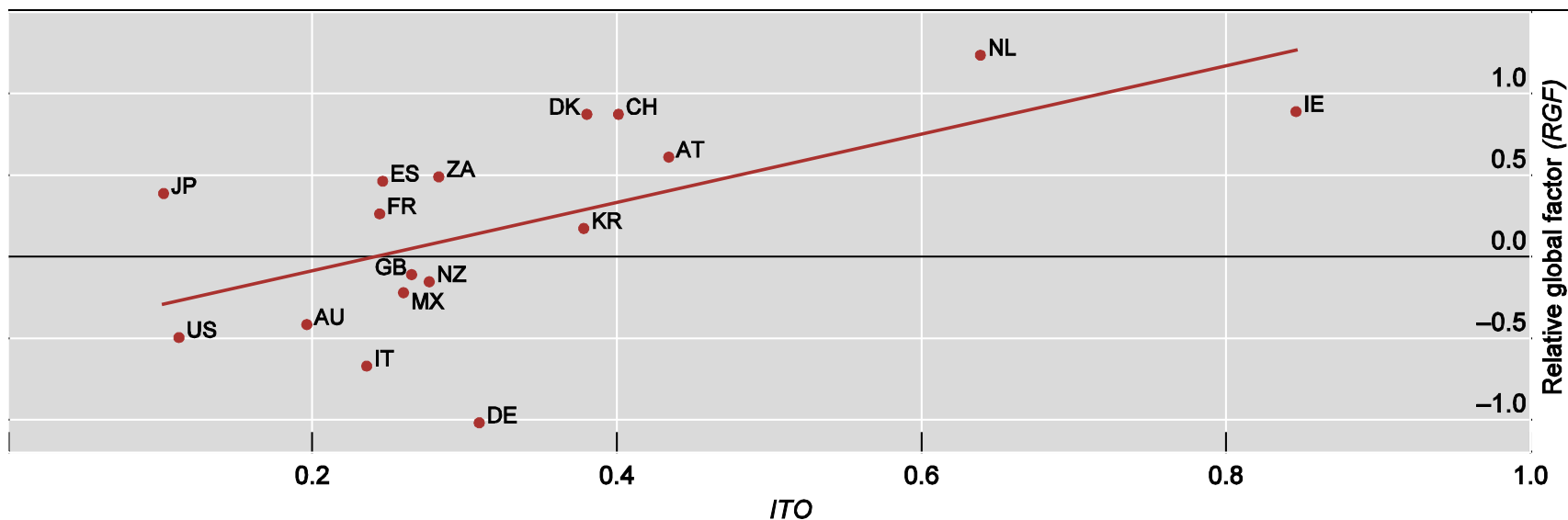
International input linkages created inflation spillovers...



Elasticity of local PPI inflation wrt global PPI inflation (Auer, Levchenko, and Saure (2017))



....and led to “globalised” inflation



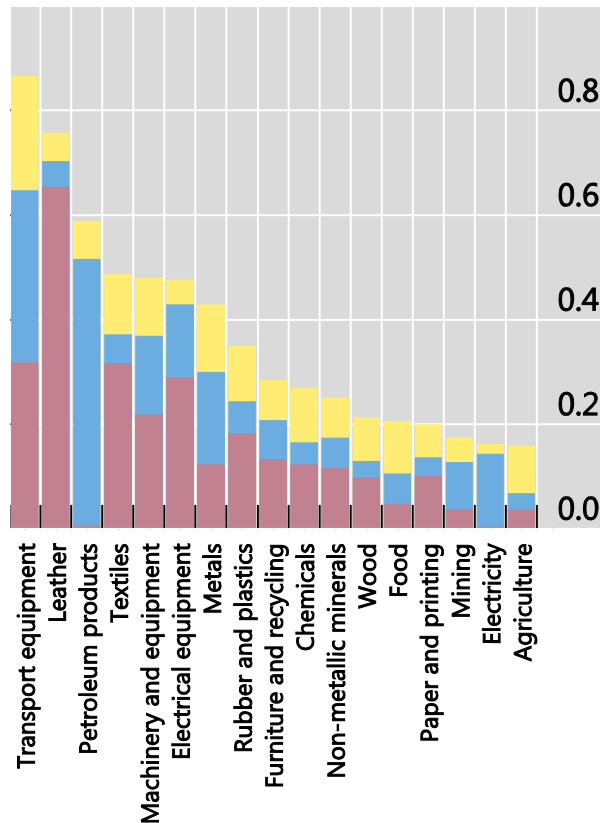
AU = Australia; AT = Austria; CH = Switzerland; DE = Germany; DK = Denmark; ES = Spain; FR = France; GB = United Kingdom; IE = Ireland; IT = Italy; JP = Japan; KR = Korea; MX = Mexico; NL = Netherland; NZ = New Zealand; US = United States; ZA = South Africa

To what extent does global slack affect domestic inflation in a Philip’s curve estimation? (Auer, Borio, and Filardo (2017))

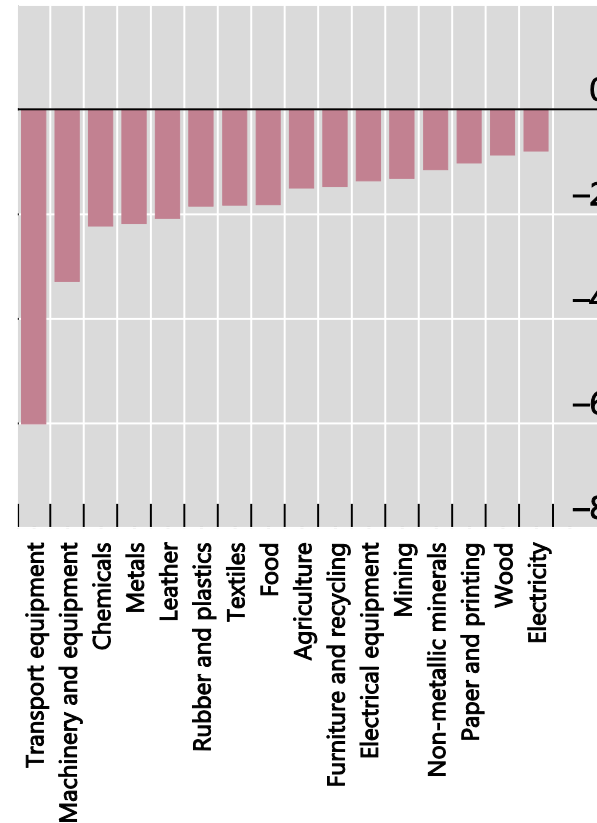


To exemplify: a 10% import tariff on Mexican and Chinese imports would affect US industry

Cost shock to US industry of a tariff¹

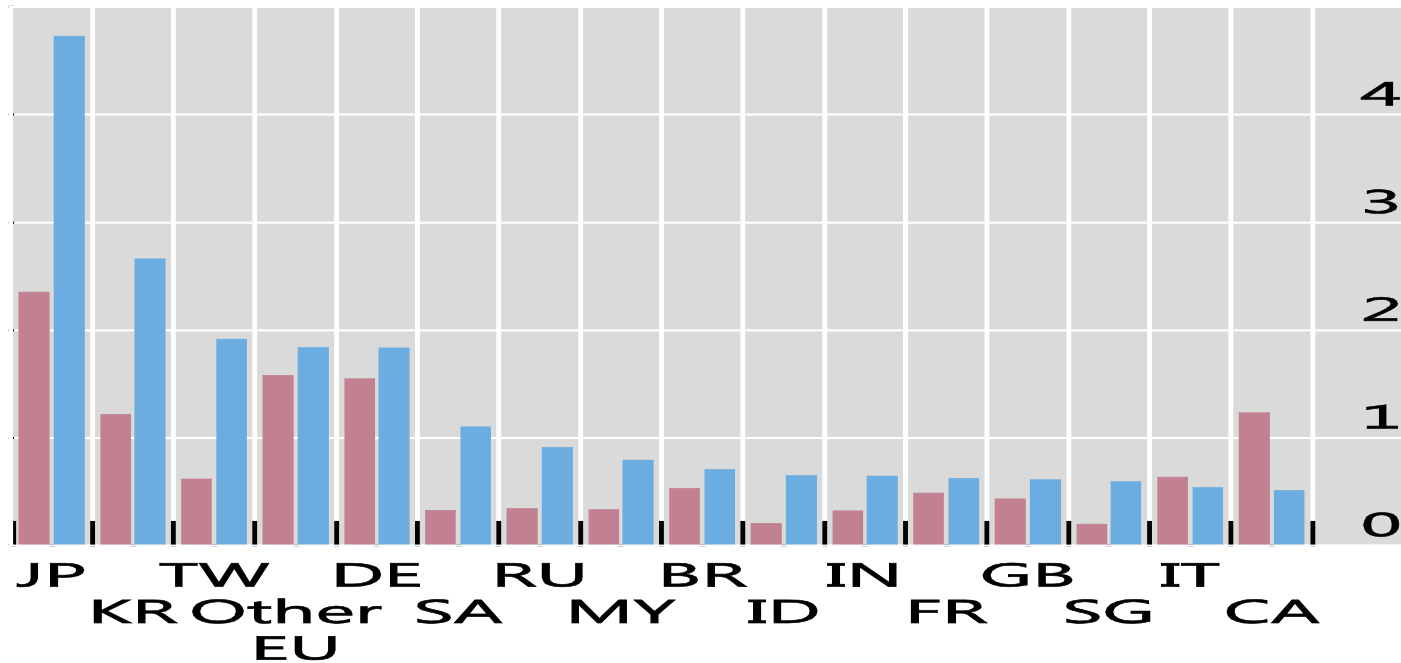


Decline in sectoral US labour costs required to compensate for higher input prices²



see BIS 87th annual report

Since foreign value is embedded in Chinese and Mexican exports...



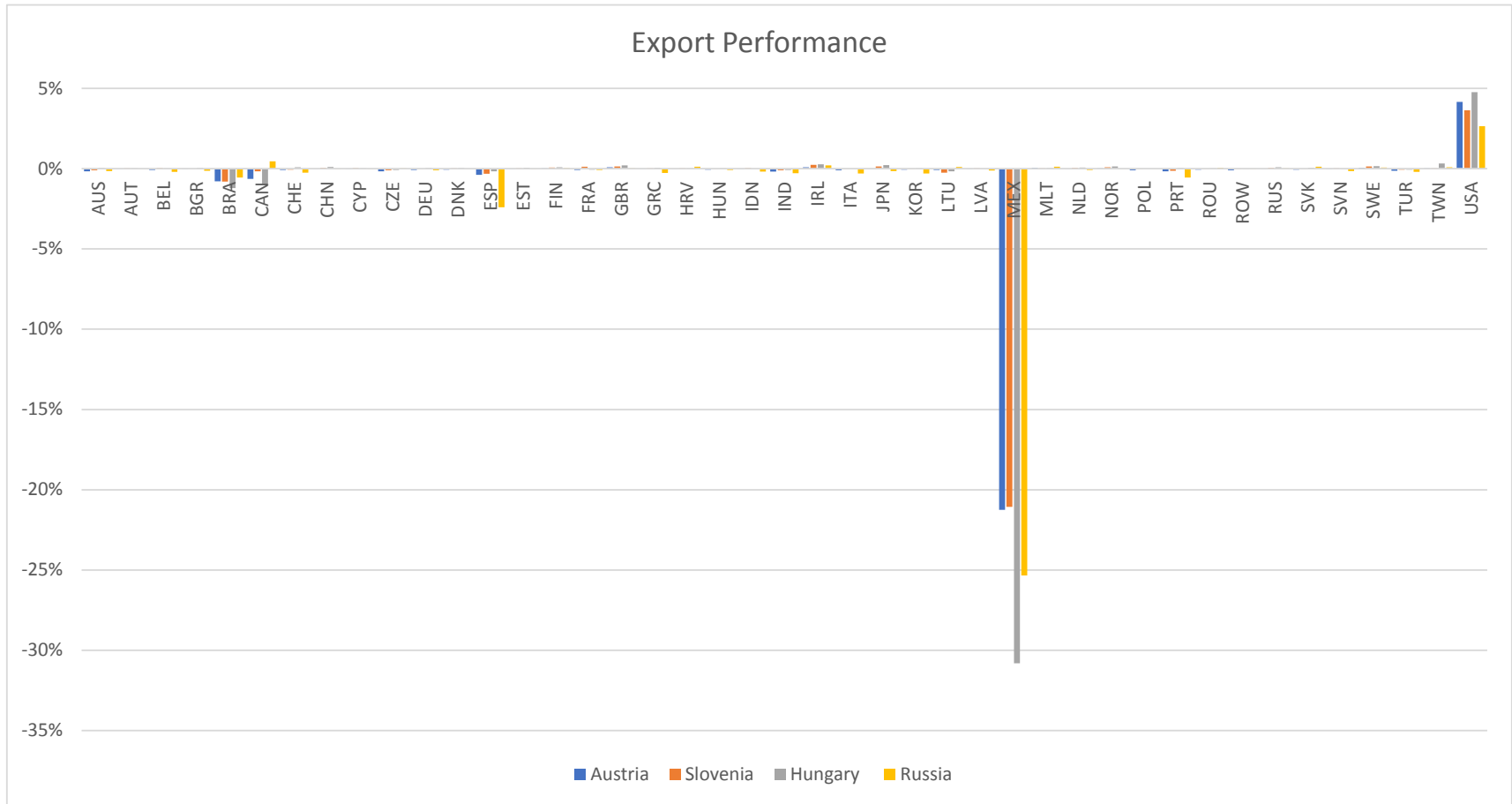
Origin of value added embodied in exports from

- Mexico
- China

see BIS 87th annual report



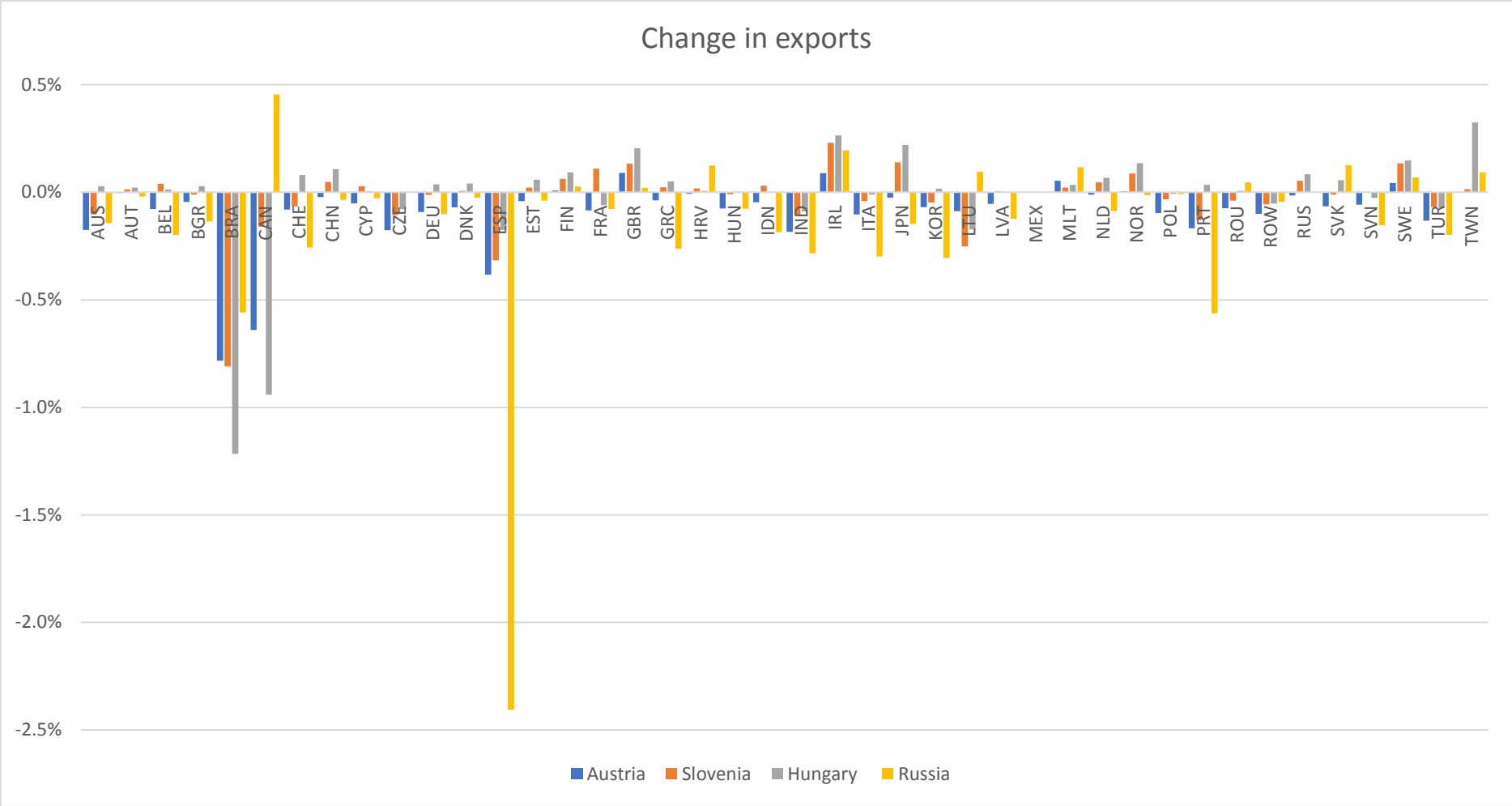
...bilateral import tariffs would shift the global geography of trade...



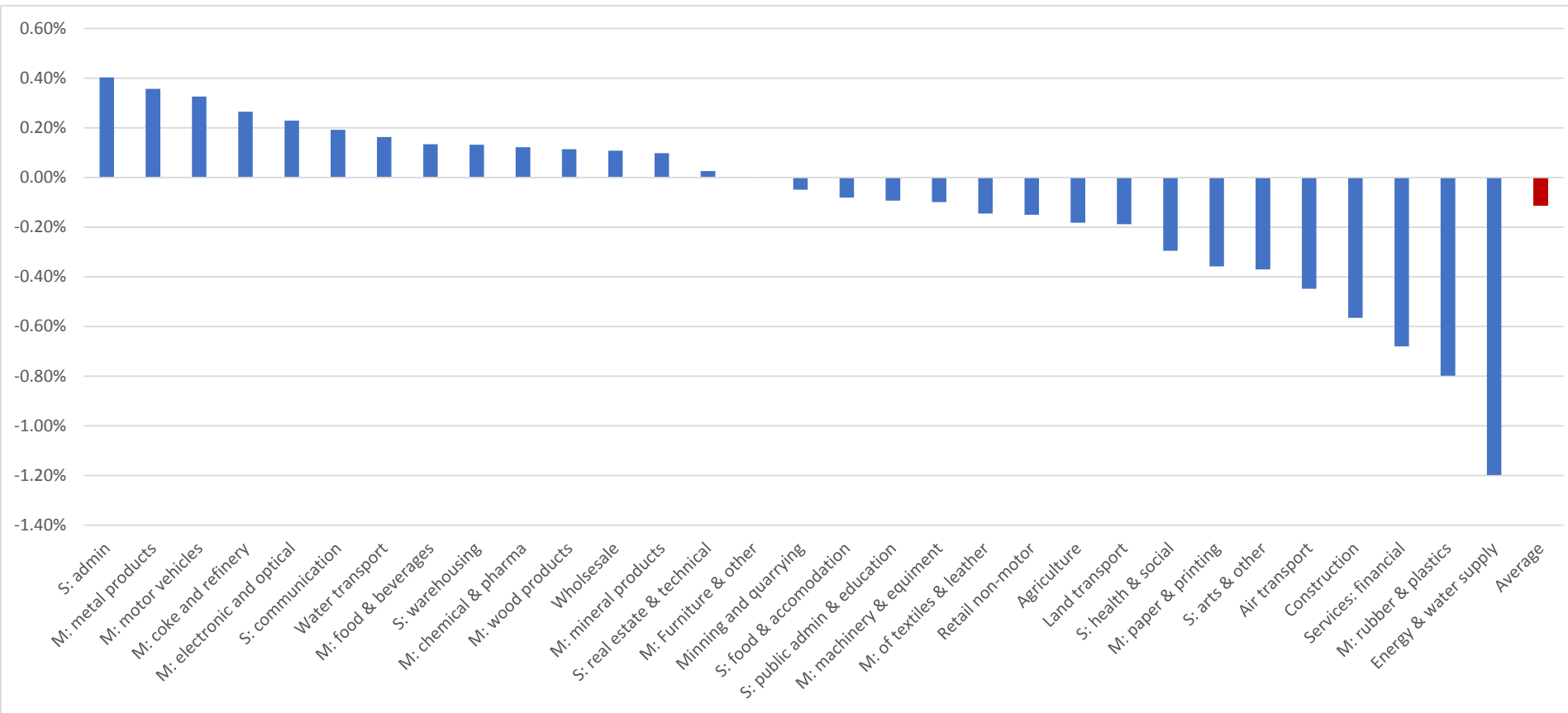
Quantification of 35% US import tariff on Mexican goods following Deckel et al. (2007), from WIOD/Timmer et al. (2016)



...also affecting third-country trade



A tariff would have heterogeneous consequences across sectors...



Quantification of 35% US import tariff on Mexican goods following Deckel et al (2007), US sectors, WIOD/Timmer et al. (2016)



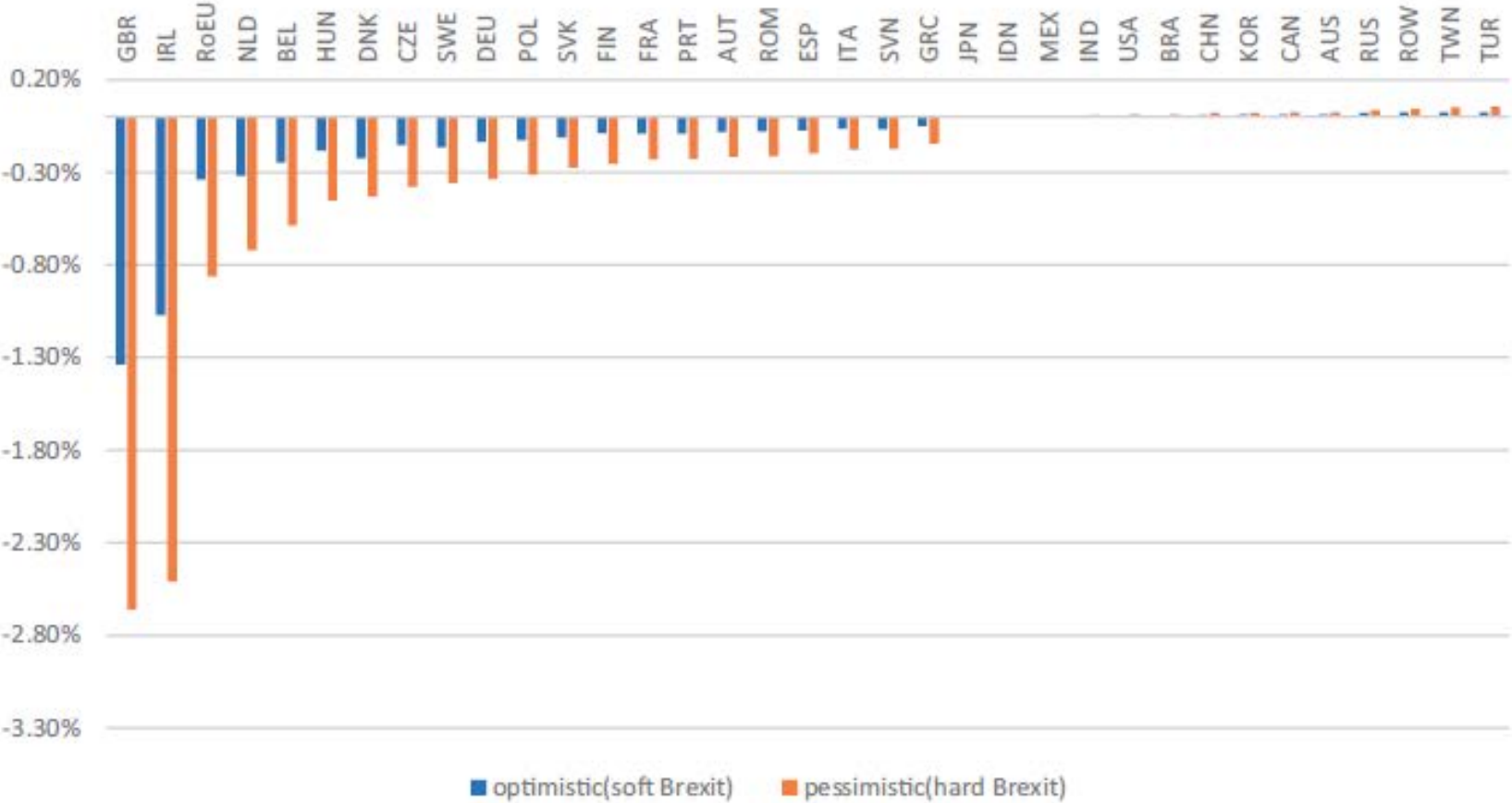
...but much less so across skill types.

	High Skill	Mid Skill	Low Skill
MEX	-1.926%	-4.110%	-2.866%
USA	-0.103%	-0.130%	-0.144%
CAN	0.097%	0.080%	-0.010%

Quantification of 35% US import tariff on Mexican goods following Deckel et al (2007), WIOD/Timmer et al. (2016)



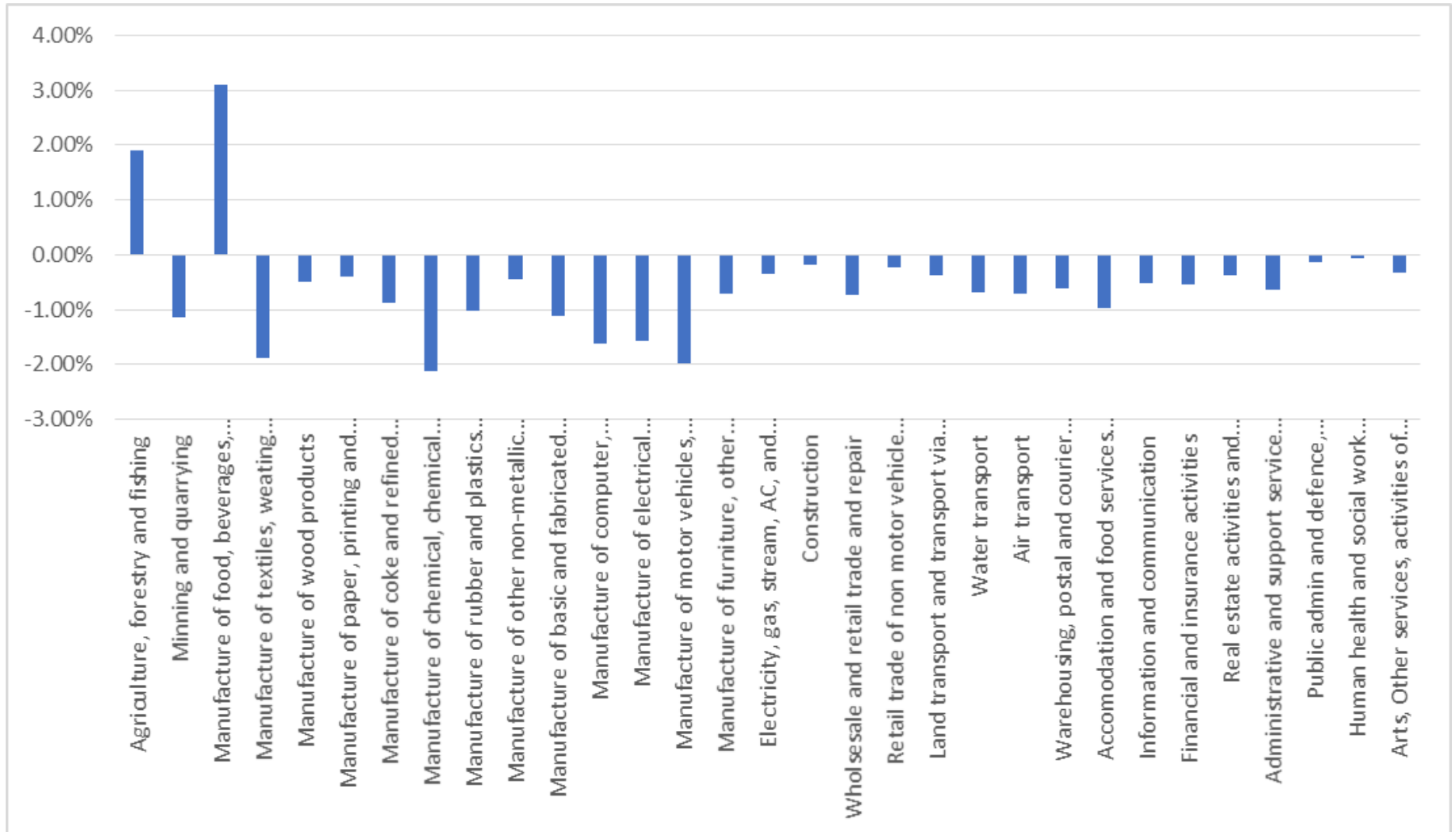
Example II: what could be impact of Brexit across countries...



From Dhingra et al. (2017)



...and sectors?



Conclusions

- GVCs:
 - have synchronized inflation
 - contributed to “globalisation” of inflation
- Protectionism:
 - would spill beyond directly affected partners via the global production network
 - could cause global inflation that has gone missing (timing?)
 - would have distributional effects across sectors, but not so much across skill types

