IAMO Forum 2017. Eurasian Food Economy

Agro-food global value chains

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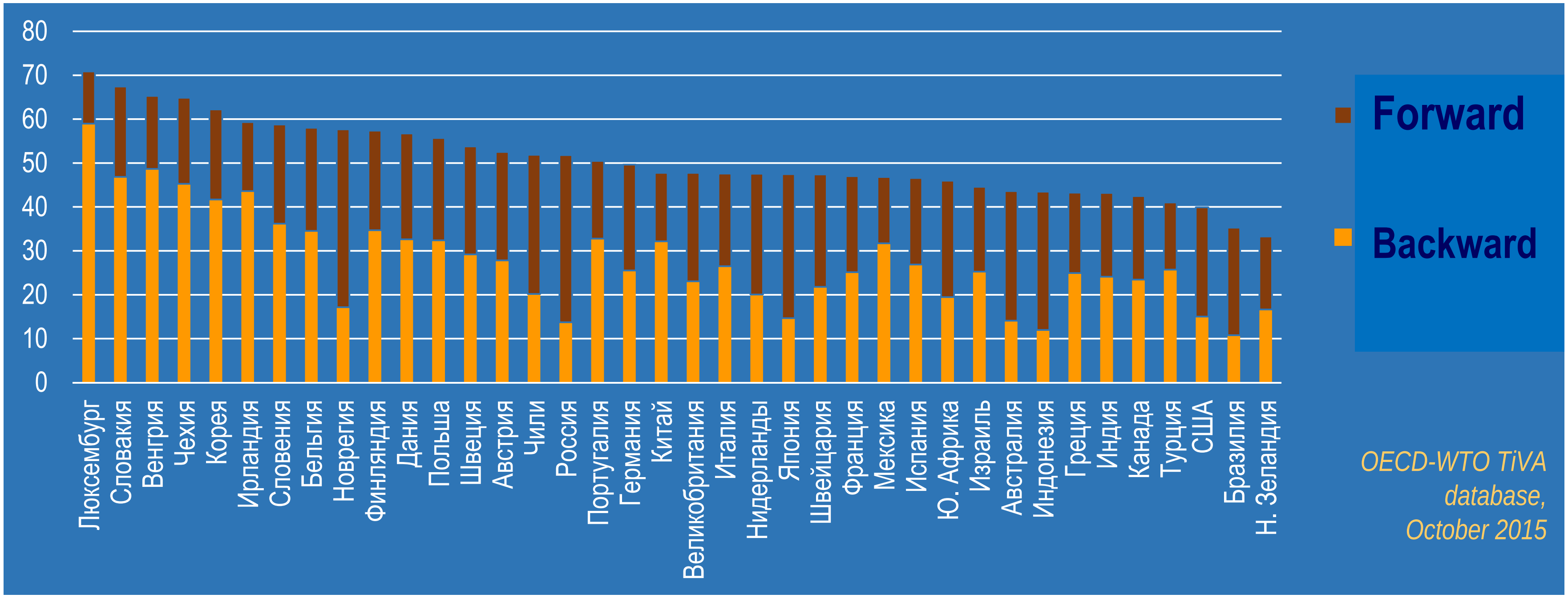
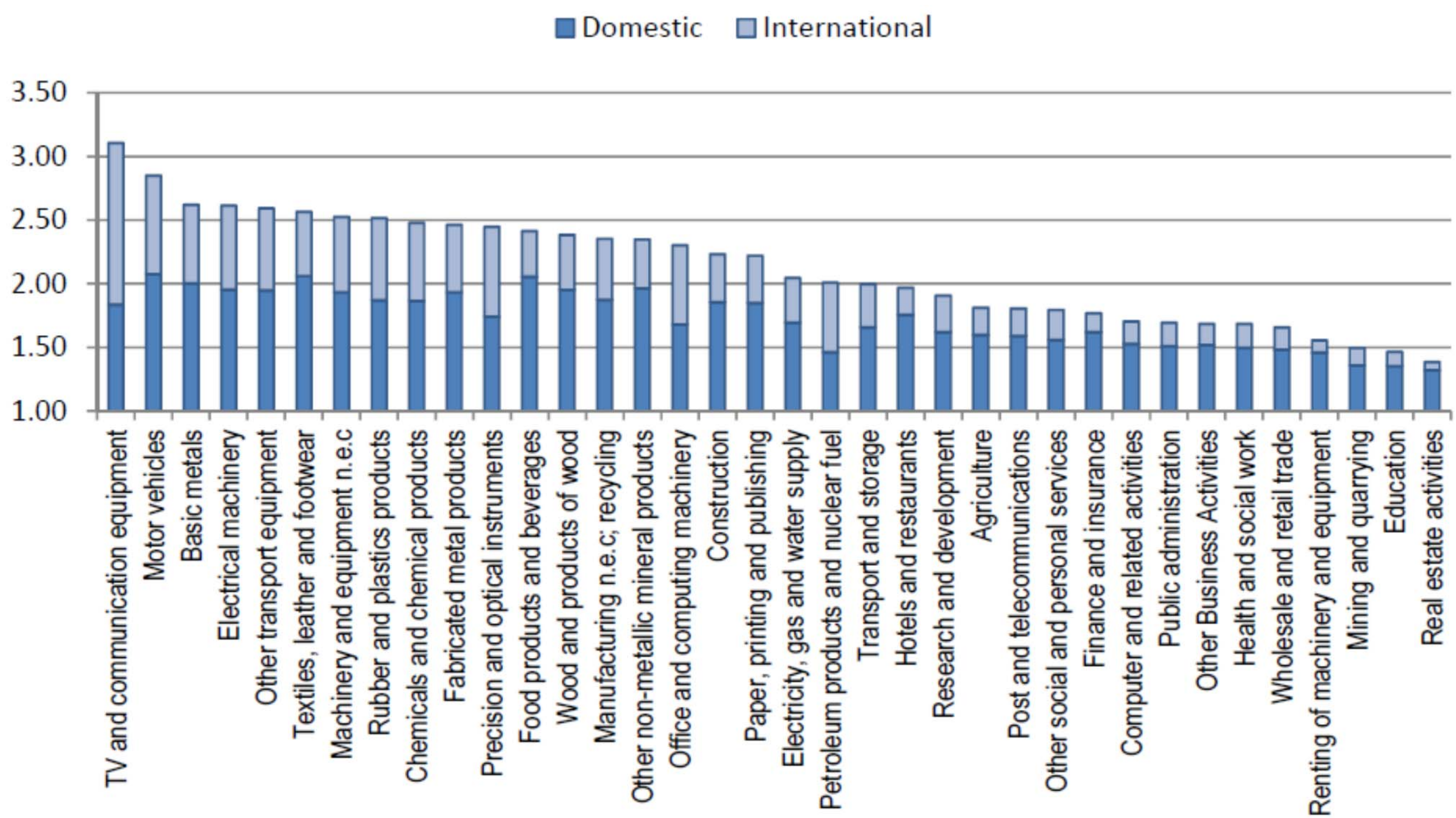
Global value chains – very important mode of international trade today

- Estimated to be around 50% of trade value
- Trade in tasks, not just in goods
- Very important role of services in good production
- Logistical services are very important, no inventories
- All these is driven by cost cutting incentives, which ensures that global firms are very competitive and efficient.

GVC participation varies a lot across countries

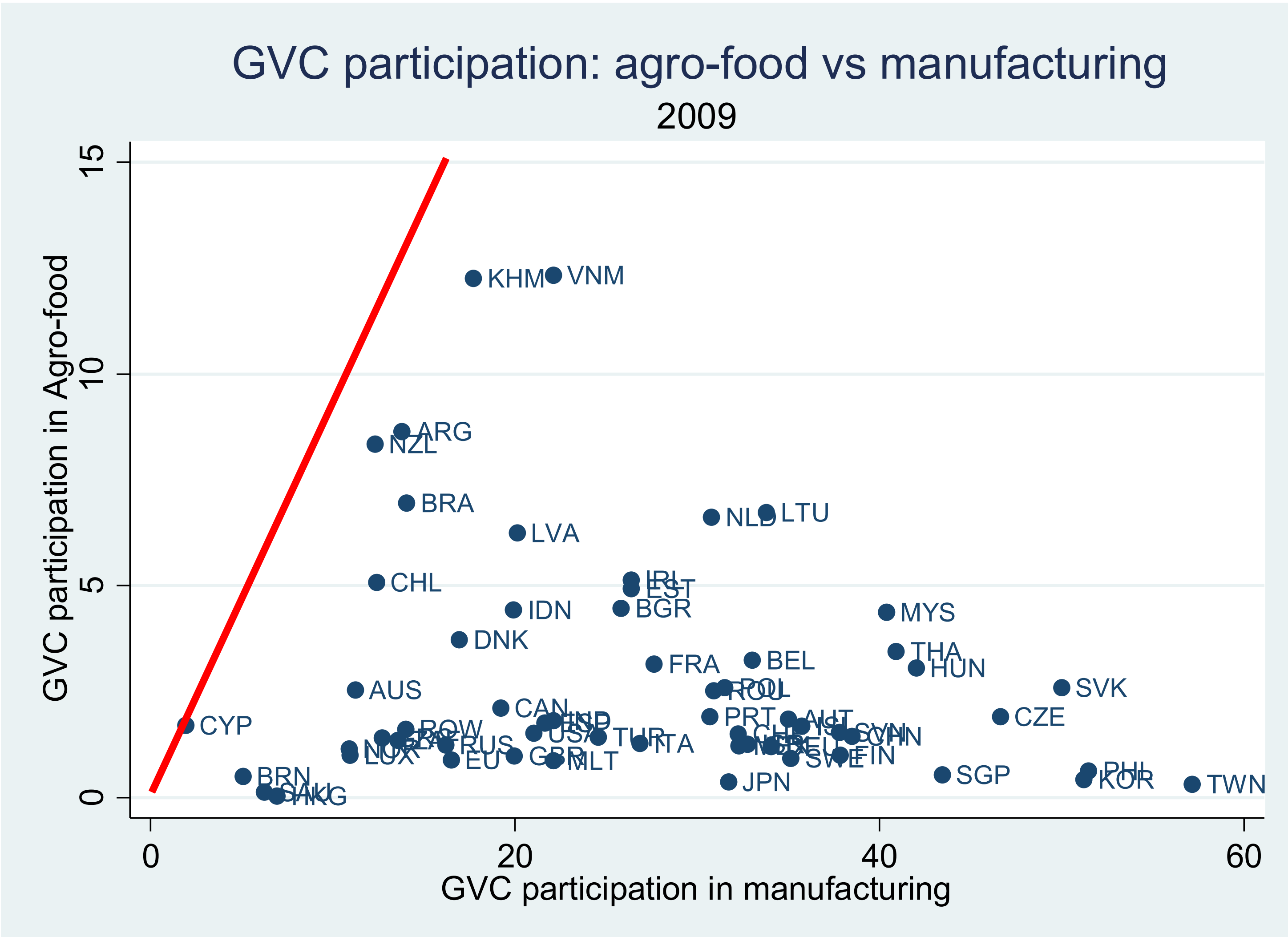


Length of GVC varies by sectors, number of intermediates

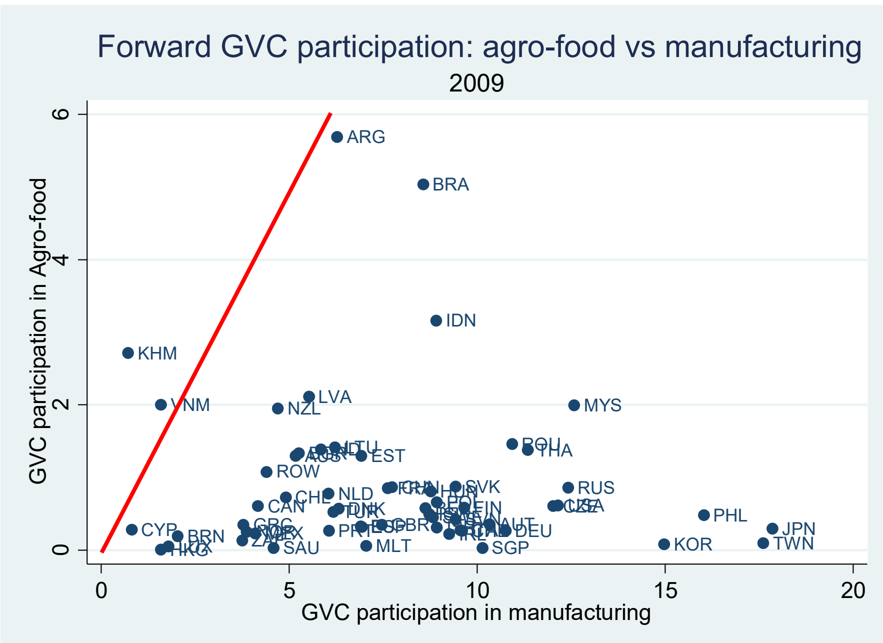


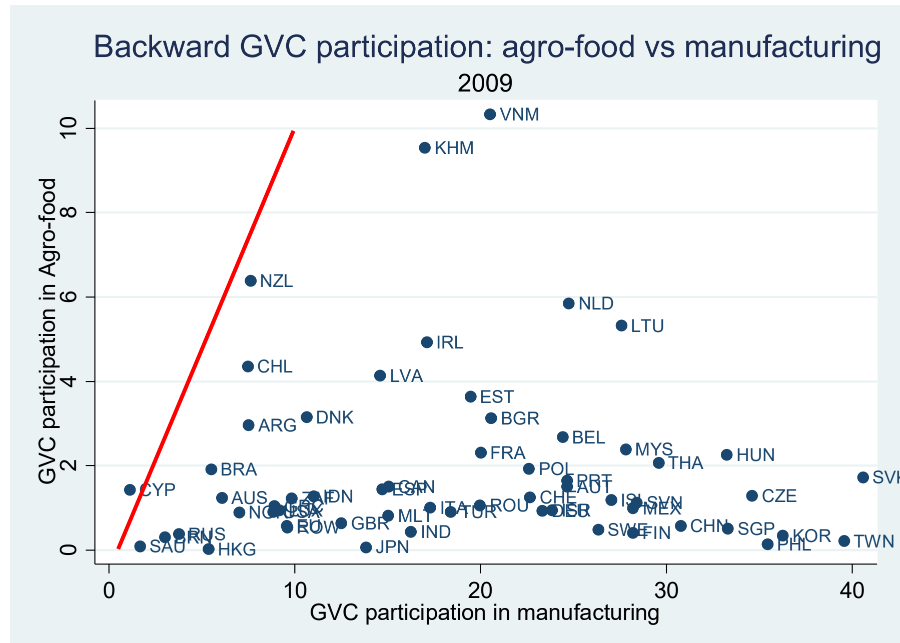
OECD, 2012

GVC in agro-food and manufacturing - comparison

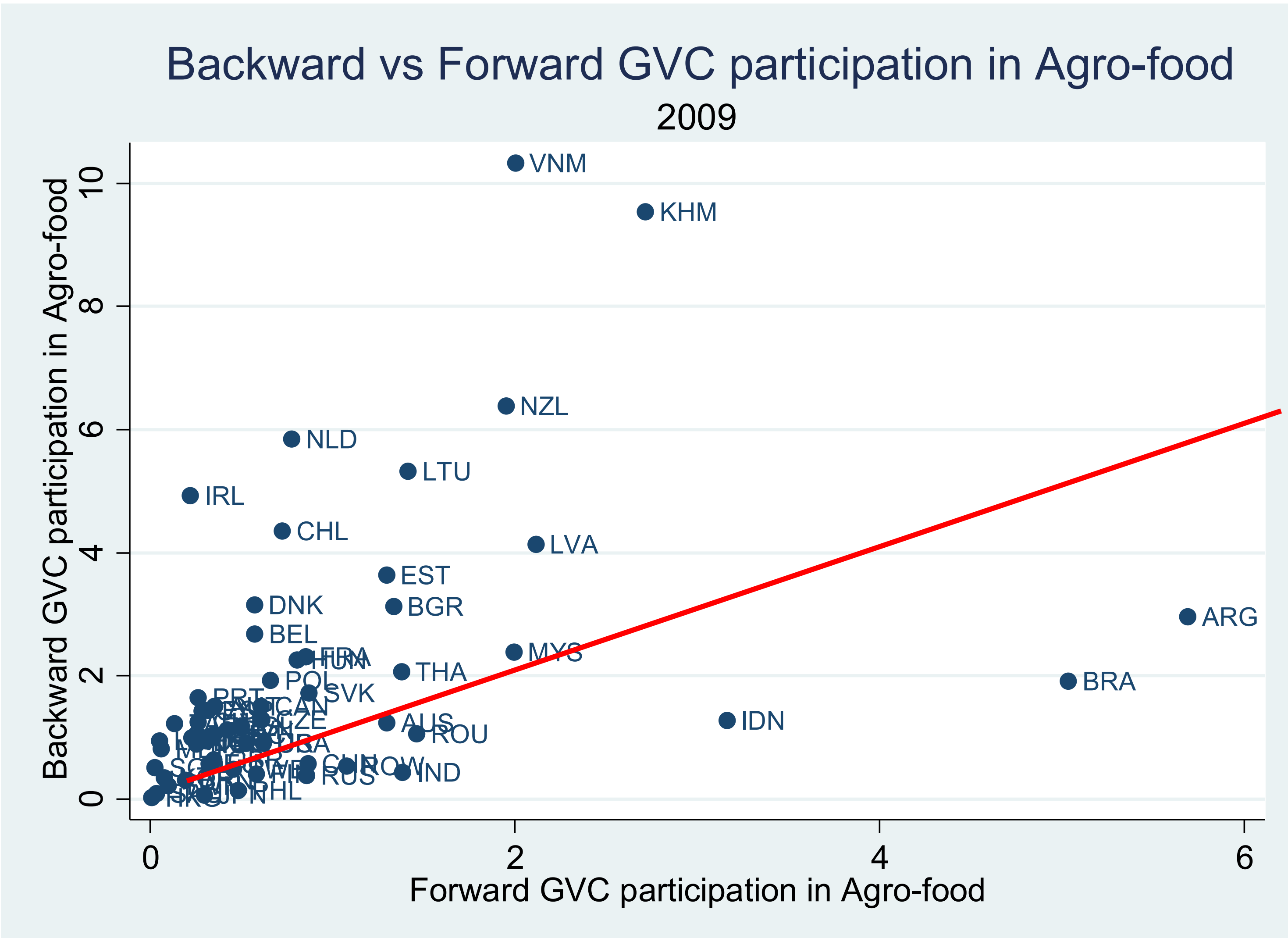


Forward and Backward GVC participation





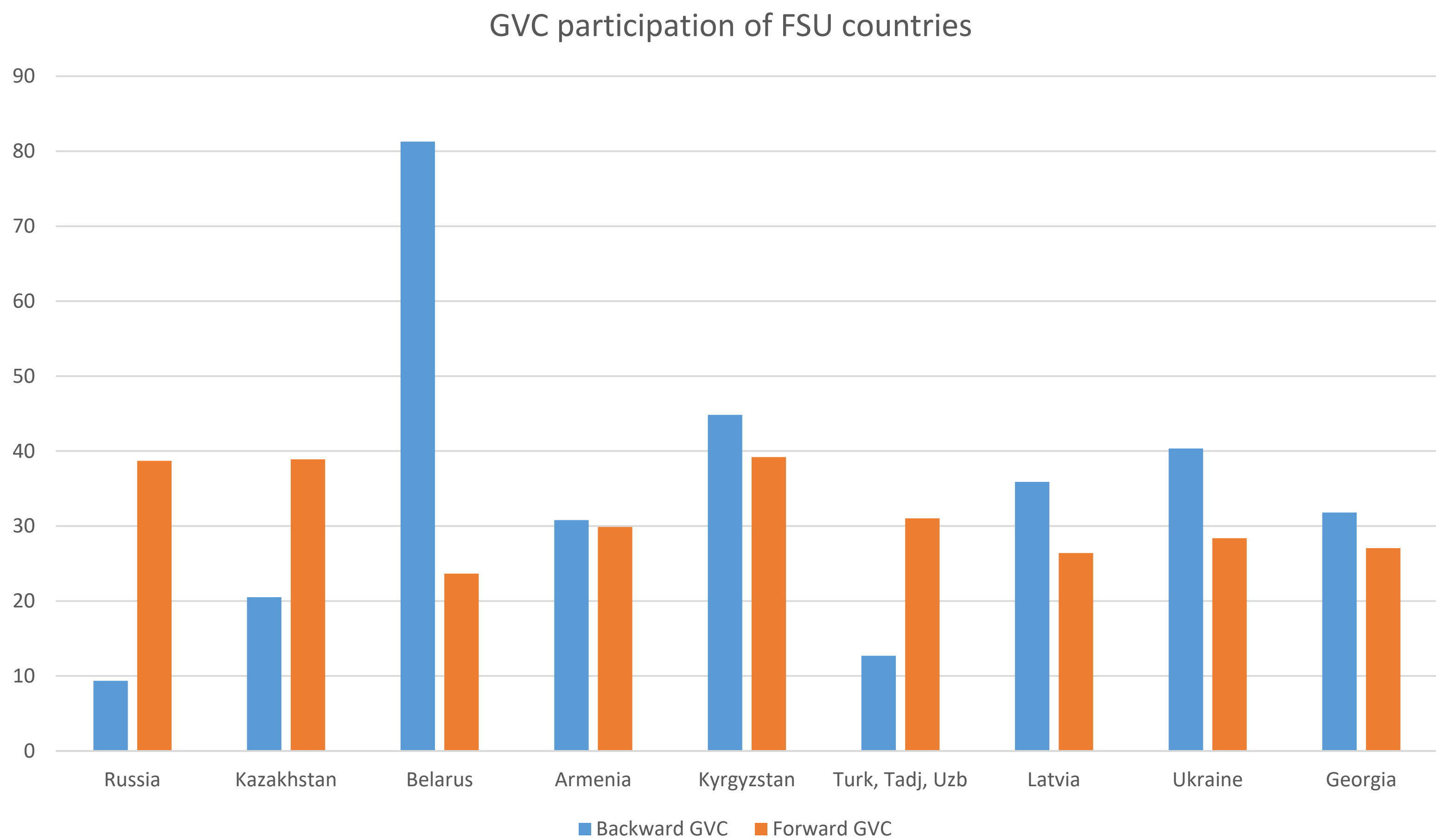
Forward vs Backward participation in Agro-Food



GVC in agro and manufacturing - summary

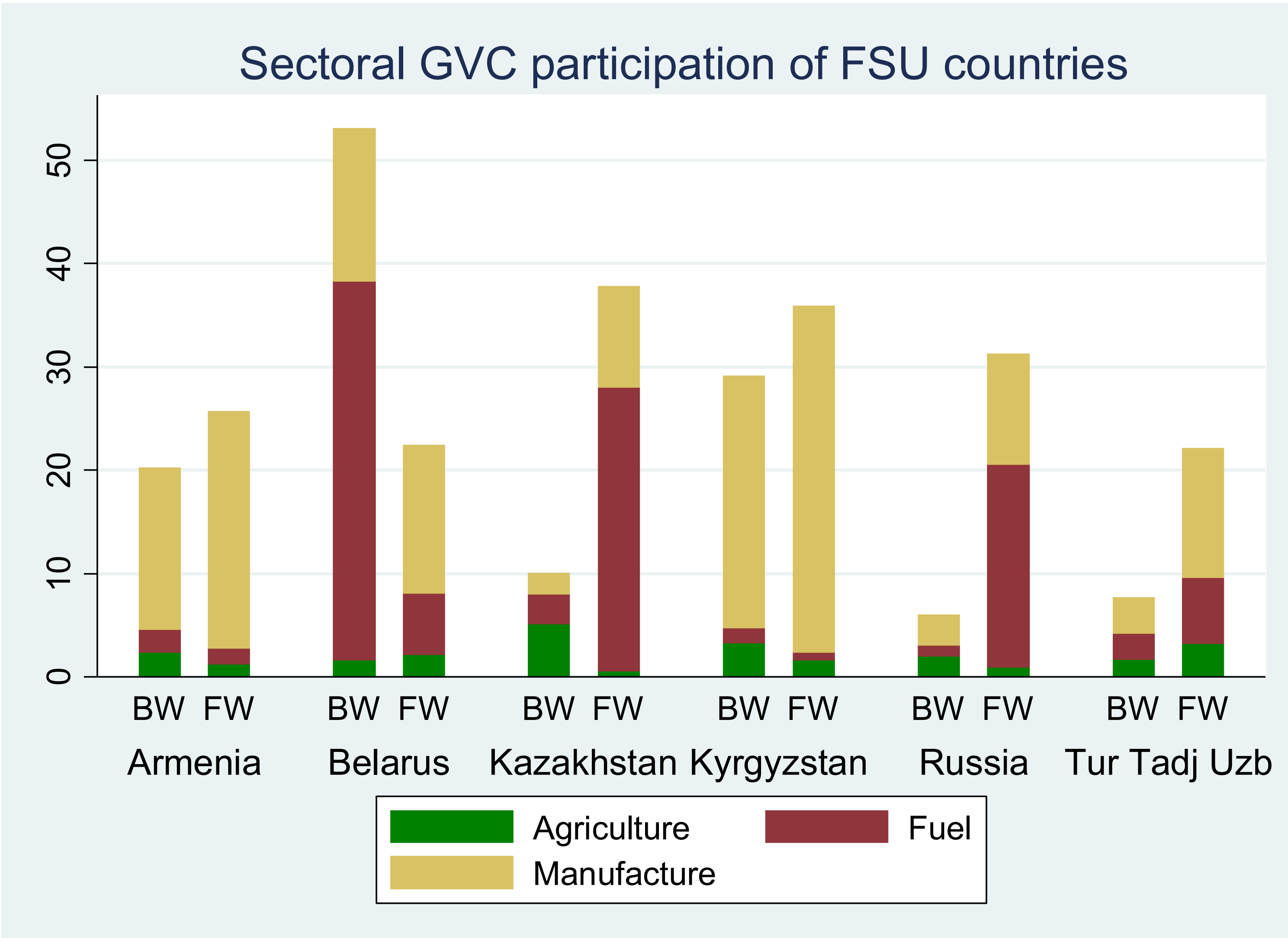
- GVC participation in agro-food much more limited than in manufacturing
- There is some positive correlation between them – role of policies
- Comparative advantage affects sectoral GVC participation
- Comparative advantage more defines Forward GVC participation in agro-food, while Backward GVC is more defined by policies
- Vietnam and Cambodia demonstrate remarkable position in agro-food GVC

Overall GVC participation of FSU countries



CEFIR calculations based on GTAPv.8

Sectoral GVC participation of FSU countries



CEFIR calculations based on GTAPv.8

GVC in Agriculture and Food in the world (OECD, 2017)

- Varying patterns of engagement in GVCs
  - European agro-food VC source globally but supply locally
  - China have a greater span in both sourcing inputs and supplying to other markets
  - US sources narrowly and more regionally focused, but supply is global.
  - Overall, agro-food global value chains are most developed in Asia and Europe compared with other regional groupings.

Policies and agro-food GVC participation (OECD, 2017)

- Trade policies are particularly important in determining GVC engagement and the domestic value added created
  - barriers to imports reduce engagement in GVCs along with the domestic returns from agro-food exports.
  - for non-tariff measures, if countries maintain more transparent and science based arrangements, that preserve the trade creating effects but avoid concerns being raised by trading partners, they can increase the domestic value added generated in exports.
- Agricultural policy and the capabilities of producers are also important.
  - Infrastructure, agricultural research and development and education enhance GVC participation and its benefits
  - non-distortive agricultural policies are important: distortive policies not only reduced some forms of GVC engagement but also reduced the domestic value added created from GVC participation.

Distortions from CET in EAEU: effective rate of protection

GTAP sectors	Effective Rate of Protection (% of VA) Actual value, 2014			
	Russia	Belarus	Armenia	Kazakhstan
Wheat	5.54	2.40	4.44	8.51
Forestry	15.83	10.10	10.49	15.37
Fishery	11.62	11.90	12.02	10.06
Meat cattle	76.52	-120.09	165.92	65.63
Diary products	42.02	-8.17	24.90	60.93
Vegetable oils and fats	2.23	-6.91	-13.65	5.64
Sugar	-25.27	22.40	-3.08	-2.03
Apparel	15.68	-11.26	17.89	14.57
Electric equipment	-4.26	41.38	-15.25	0.58
Leather products	30.48	-39.95	70.39	52.52
Ferrous metals	14.74	12.82	9.54	12.80

Trade across the borders and GVC participation (preliminary results)

- We find Trade Across the Border index from Doing Business has negative and significant effect on agro-food GVC participation, while have no effect on manufacturing GVC participation
- Out of different measures we find #of days to export has the strongest effect on Forward GVC participation

Doing Business 2017 in EAEU

	Armenia	Belarus	Kazakhstan	Kyrgyzstan	Russia
Ranking (из 189)					
Easiness of doing business	38 (35)	37 (44)	35 (41)	75 (67)	40 (51)
Trade Across Borders	48 (29)	30 (25)	119 (122)	79 (83)	140 (170)
Export, time (days)					
Documents	2	4	128	21	25
Crossing the border	39	5	133	20	96
Export, costs ($)					
Documents	100	108	320	145	765
Crossing the border	150	140	574	445	92
Import, time (days)					
Documents	2	4	6	36	43
Crossing the border	41	1	2	37	96
Import, costs ($)					
Documents	100	0	0	200	153
Crossing the border	100	0	0	512	1125

Policy improvement in EAEU countries might have a very strong effect of GVC participation

- Smart approach for CET setting accounting for distortive effect on sectoral development
  - Protection vs. anti export bias
- Customs reform, especially in Russia
- Overall policy stance
  - Too much of import substitution
  - Food sovereignty, not food security
- There are some changes recently, but not enough

Role of imports in GVC – firm level evidence

Trade Premia, Russian firms, %

	Exporter	Importer	Exporters and Importers	Exp&Imp Vs. Exporters	Exp&Imp Vs. Importers	Exporter	Importer	Exporters and Importers	Exp&Imp Vs. Exporters	Exp&Imp Vs. Importers
Employment	558	452	944	247	260					
Productivity	138	166	182	66	32	32	62	35	85	32
Total assets	1940	2170	4277	687	358	117	239	166	154	54
Investments*	275	500	500	511	123	74	237	169	247	30
Prof margin*	34	34	45	23	22	31	33	42	15	12
N observations	23187	23187	23187	2411	3005	23187	23187	23187	2411	3005

Controls: industry (3 digit NACE) & region. Columns (6-10) – firm size as well

** - less observations than above*

Role of services and infrastructure

- GVC – trade in tasks, so very high demands to the quality of infrastructure to coordinate the overall process of product creation
  - Logistics
  - Transportation
  - ITC
- Silk road initiative could have a very strong effect on GVC participation of countries along the way

Conclusions

- GVC participation requires coordination of many policies
  - Foreign investment
  - Trade policies
  - Infrastructure development
  - Service liberalization
- So far EAEU countries with few exceptions are lagging behind in all aspects, while have potential driven by comparative advantage
- Common trade policy in EAEU should be reevaluated having GVC aspect
- For agro-food GVC food security concern should be reconsidered without regard for ideology