

Export Diversification Prospects in Armenia

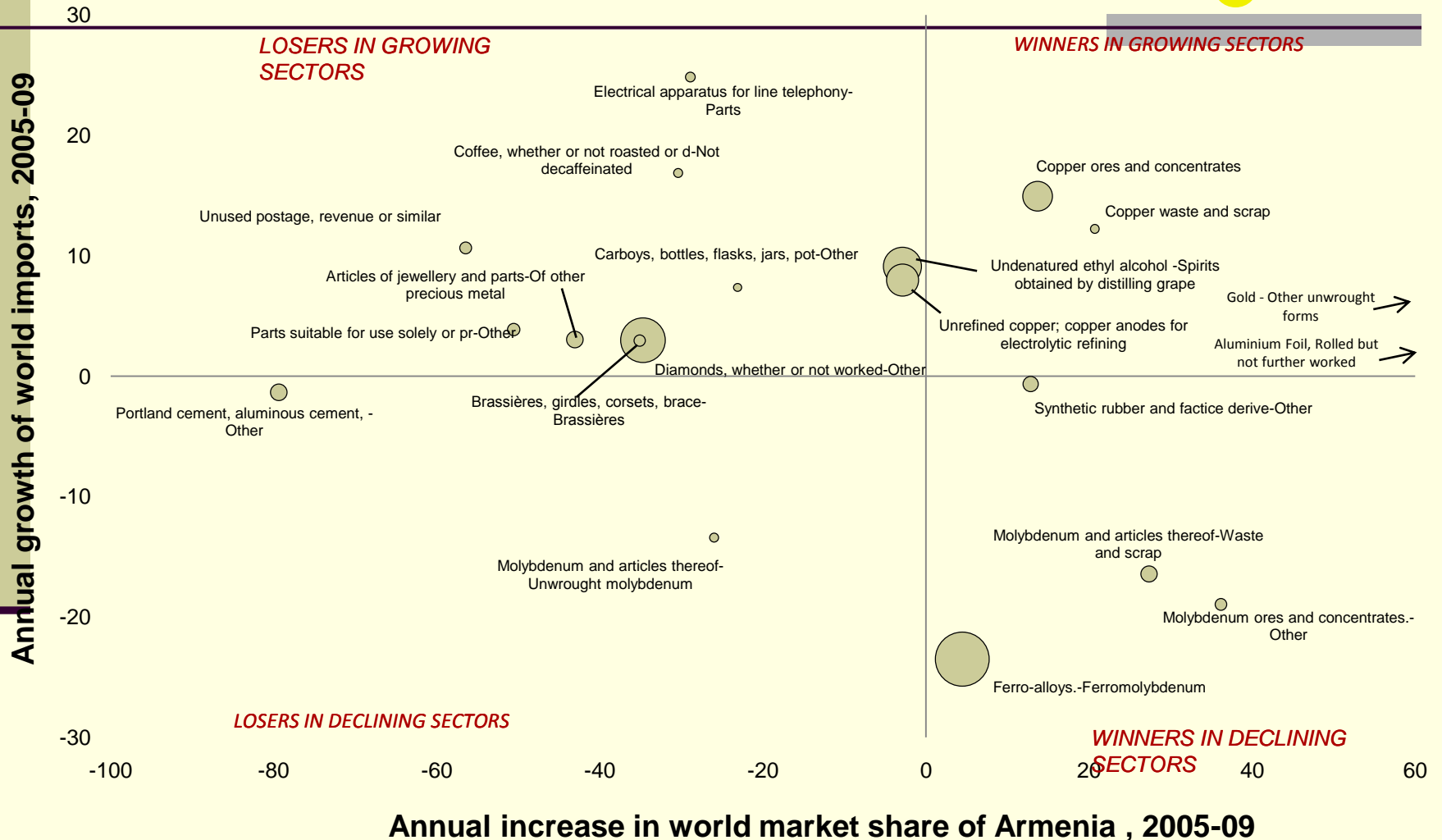
some preliminary thoughts

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Growth of national supply and international demand for export products of Armenia, 2005-09

Top 20 true exports * with RCA>1 shown

Scale: \$140M/year

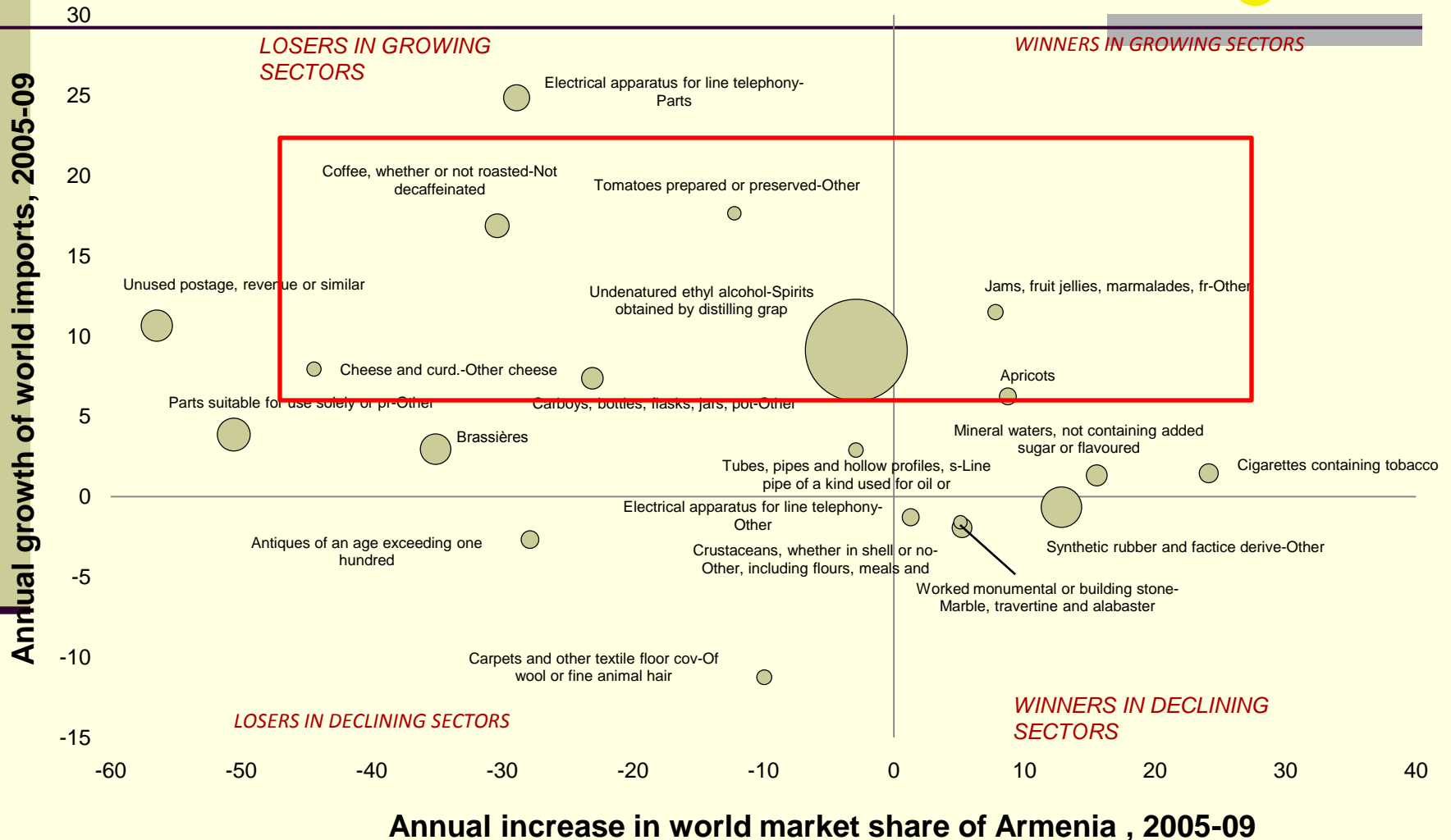


* "True" exports = 6-digit HS2002 products with export value>\$5,000 for 3 out of 5 years; "top 20" = highest export value totals over 5 years

Growth of national supply and international demand for non-resource-based export products of Armenia, 2005-09

Only top 20 true non-resource-based exports * with RCA>1 shown

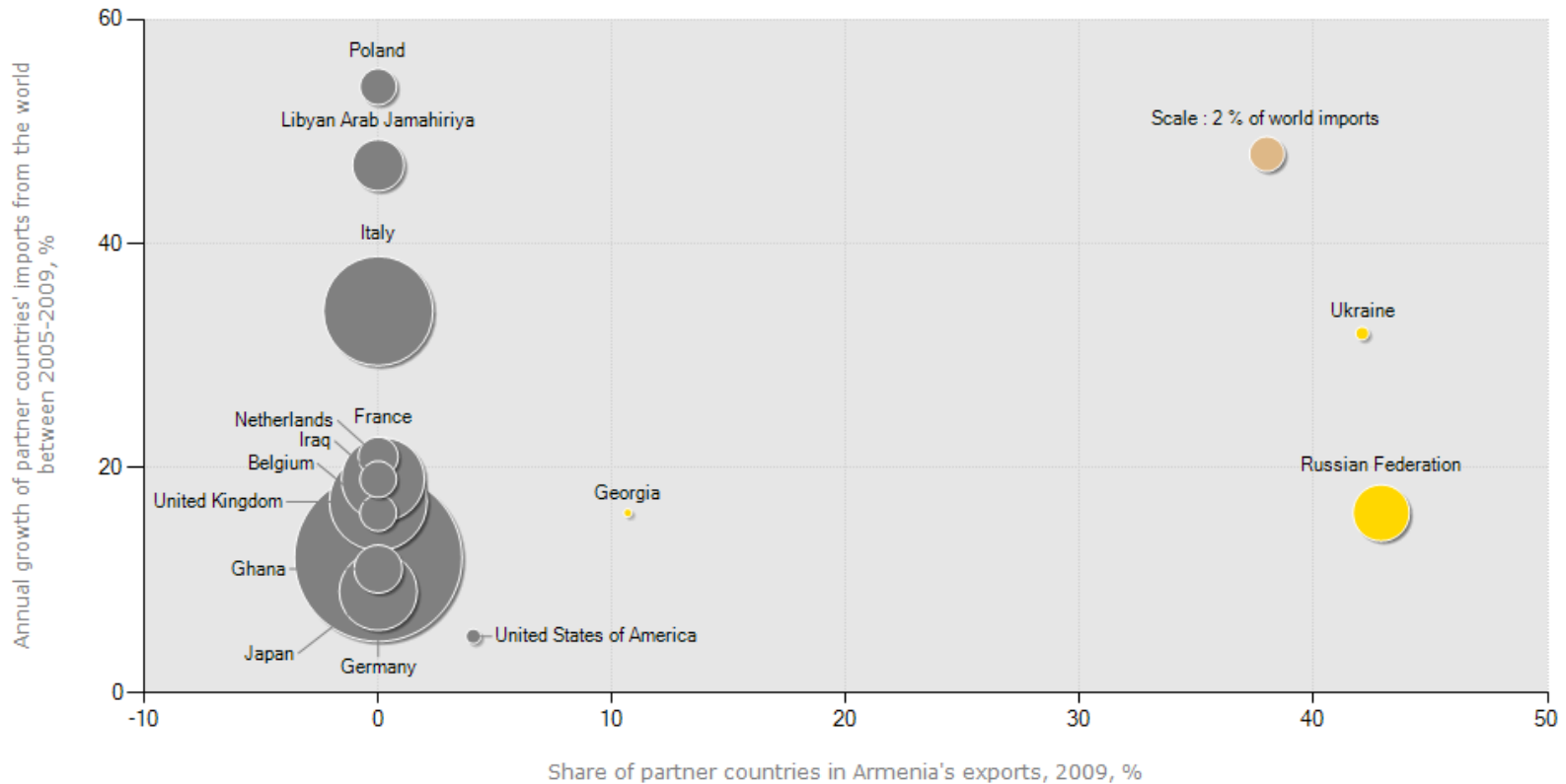
Scale: \$15M/year



* "True" exports = 6-digit HS2002 products with export value>\$5,000 for 3 out of 5 years; "top 20" = highest export value totals over 5 years; "non-resource-based" = excludes HS2002 codes: 25-27, 71, 74-81

Tomatoes, prepared or preserved: Destinations

Prospects for market diversification for a product exported by Armenia in 2009
Product : 200290 Tomatoes nes,prepared or preserved oth than by vinegar or acetic acid



● Armenia export growth to partner < Partner import growth from the world

● N.A.

● Reference bubble

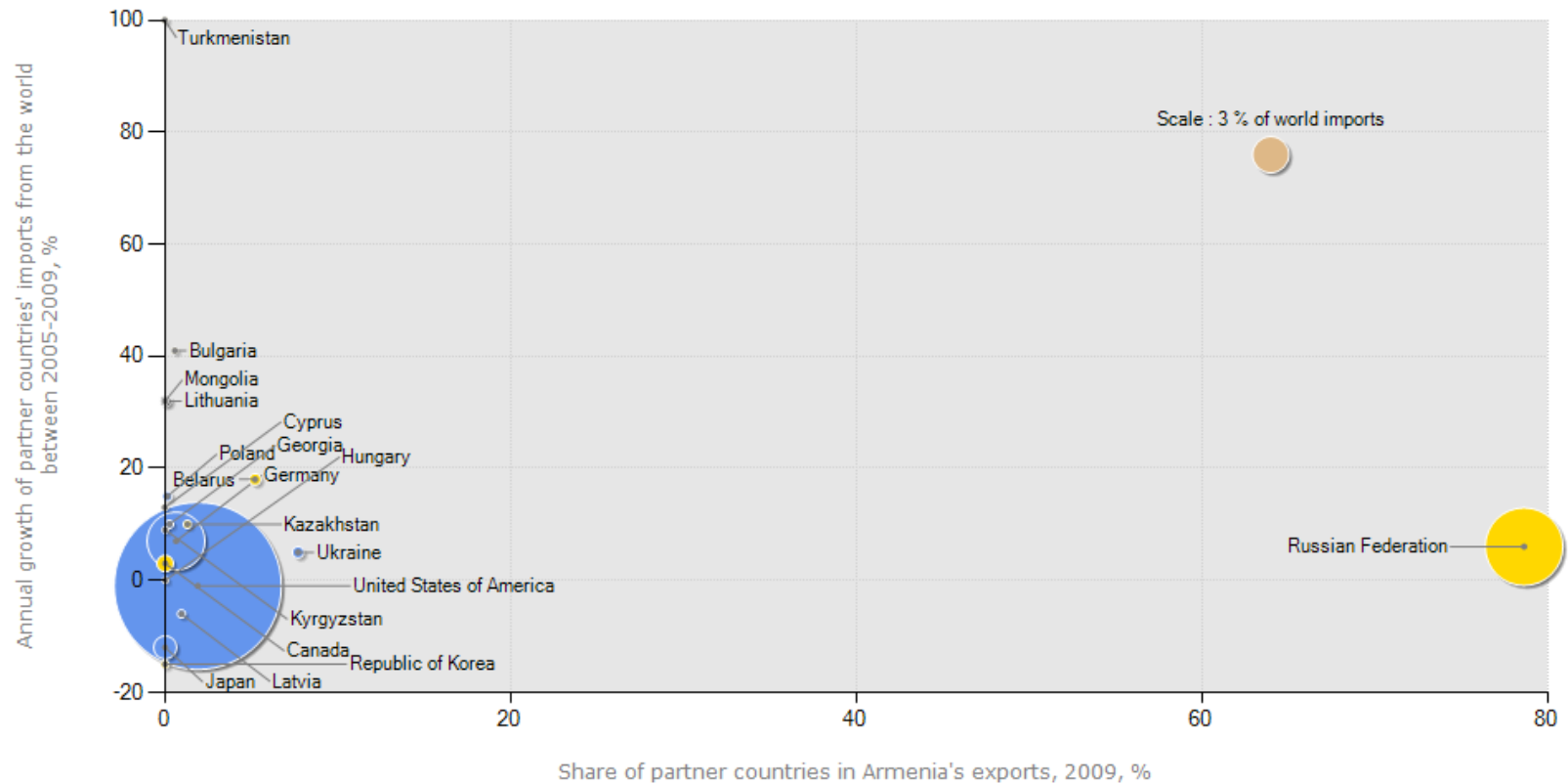
Bubble size is proportional to the share in world imports of partner countries for the selected product



* Note that the position of bubbles on x-axis represents importer's share of exports, regardless of bubble color

Spirits obtained by distilling grape wine: Destinations

Prospects for market diversification for a product exported by Armenia in 2009
 Product : 220820 Spirits obtained by distilling grape wine or grape marc



● Armenia export growth to partner < Partner import growth from the world

● Armenia export growth to partner > Partner import growth from the world

● N.A.
● Reference bubble

Some bubbles may not be displayed due to lack of growth rate indicators

Bubble size is proportional to the share in world imports of partner countries for the selected product



* Note that the position of bubbles on x-axis represents importer's share of exports, regardless of bubble color



Insights from a Recent Report on Central Asia

The report in one sentence

The way to expand trade in Central Asia is by connecting leading cities and their hinterlands to leading regional markets

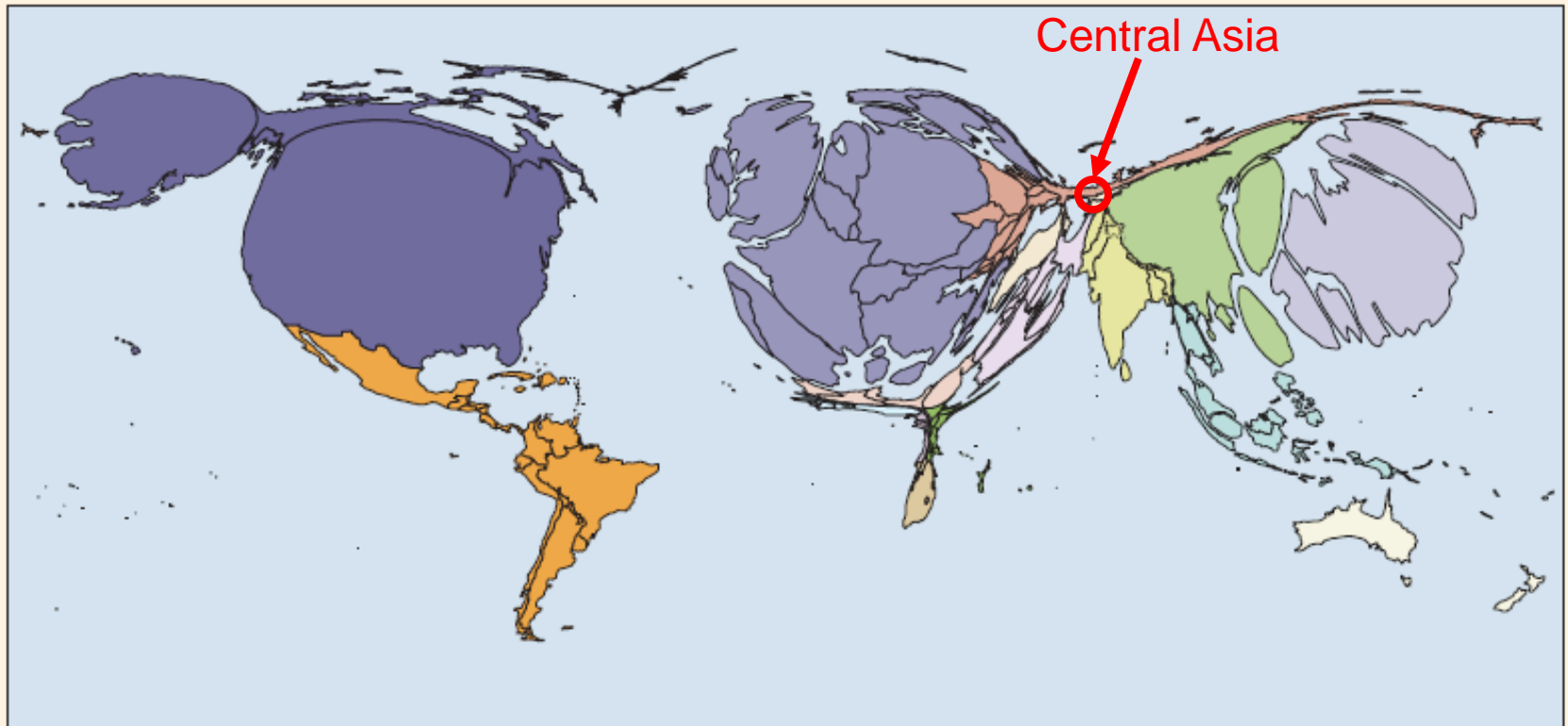


Why is it this way?

Why this way?

A look at the world's economic map

A country's size shows the proportion of global gross domestic product found there




Source: WDR 2009 team using 2005 GDP (constant U.S. dollars).

Note: The cartogram was created using the method developed by Gastner and Newman (2004). This map shows the countries that have the most wealth when GDP is compared using currency exchange rates. This indicates international purchasing power—what someone's money is worth if spent in another country.

Managing the three D's in Central Asia

What the report is proposing

- **Density** → *Focus on the two leading cities (Almaty and Astana in Kazakhstan, Bishkek and Osh in the Kyrgyz Republic, and Dushanbe and Khujand in Tajikistan) to explore various possibilities to jump start export diversification and trade*
- **Distance** → *Better connect the leading cities with their agricultural hinterland to unleash the region's agro-related activities' potential*
- **Division** → *Better connect the macro-regions (leading cities and hinterlands) to major regional markets (such as China, India, Russia, and Turkey) along the north–south road corridor*



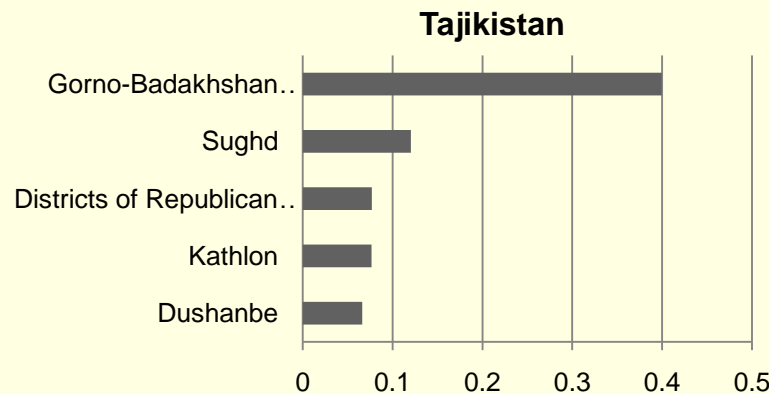
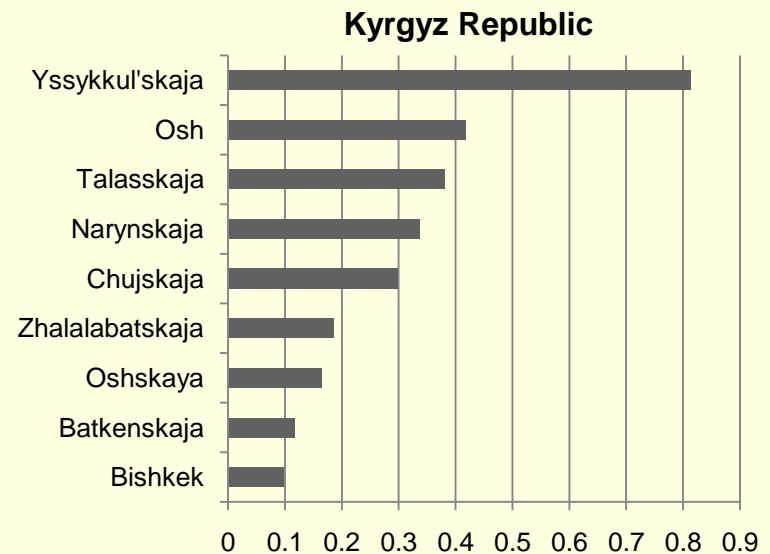
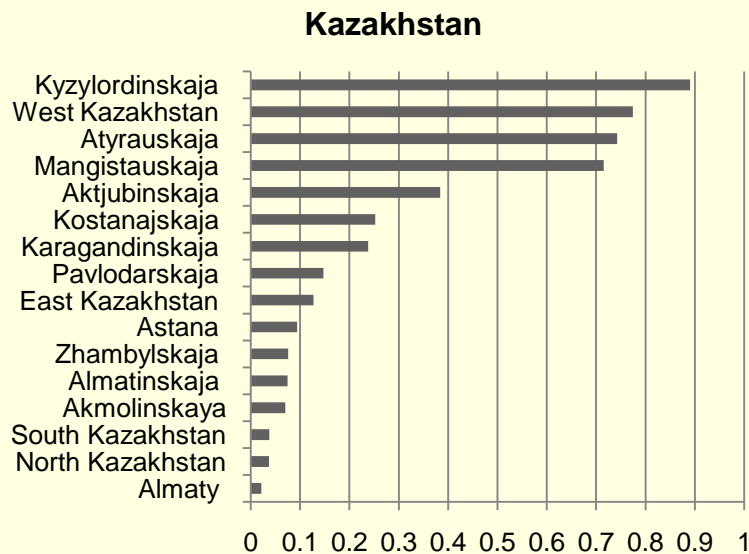
Why focus on leading cities?

Why leading cities?

- **Leading cities** are the most diversified production places in Central Asia → **They should drive the diversification strategy**
- **Leading cities** are the main exit points in Central Asia → **They should be the nodes of the regional connectivity**

Leading cities are the most diversified production places

Standardized Herfindhal Index by Oblasts
 Lower Index Scores → More Diversification

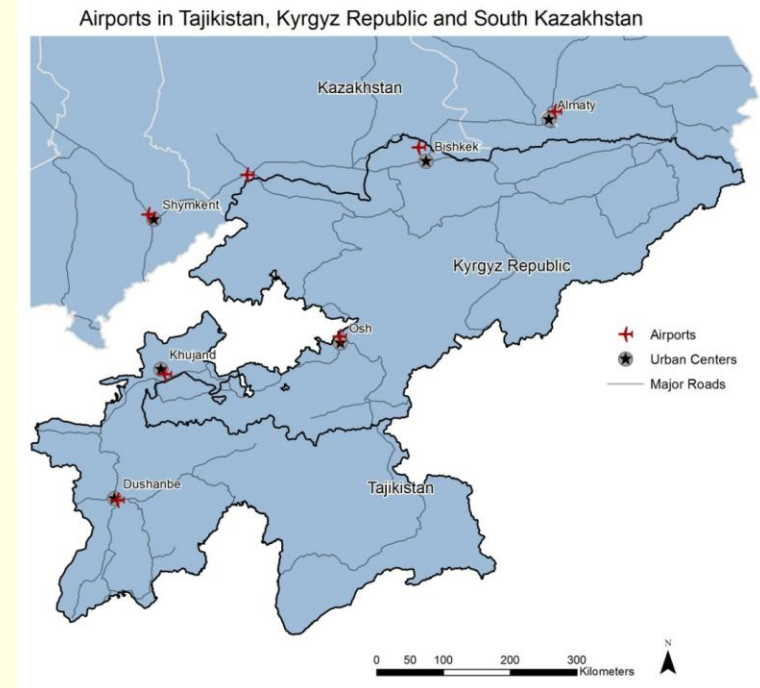
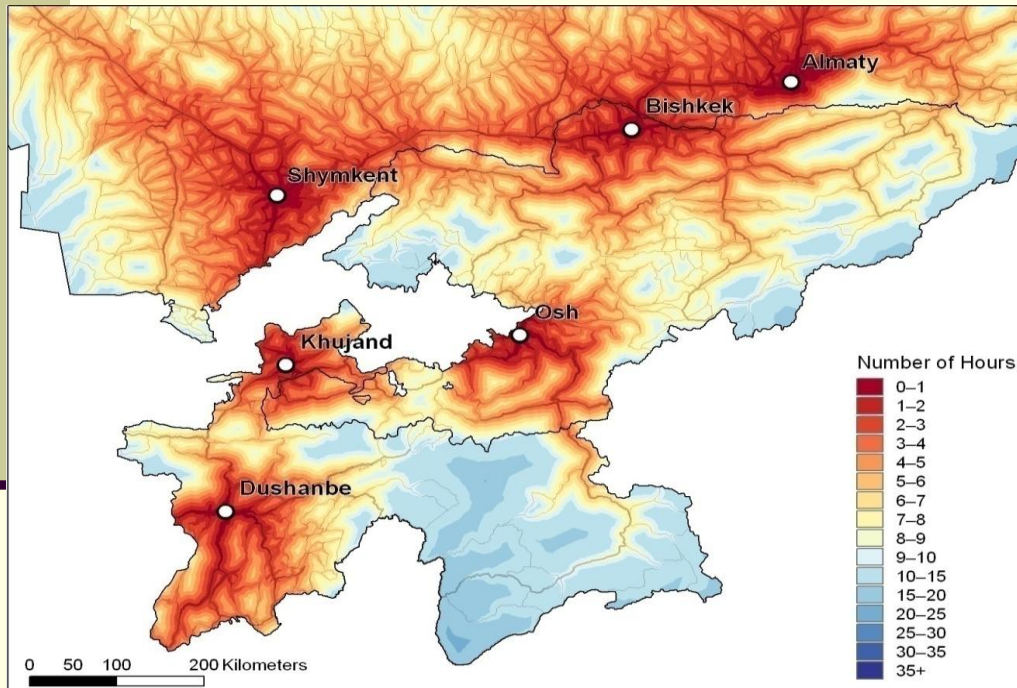


Source: Authors' computations based on data from the statistical agencies of Kazakhstan, the Kyrgyz Republic, and Tajikistan.

Note: A location is extremely diversified if the Herfindhal index is less than 0.1, moderately diversified if the index is between 0.1 and 0.3, and extremely specialized if the index is higher than 0.3.

Leading cities are the main exit points in Central Asia

- Leading cities are exit points for road travel (left) as well as air travel (right).



Why incorporate leading cities' hinterlands?

Why leading cities' hinterlands?

- Central Asia has a revealed comparative advantages in providing agro-related activities
- **Leading cities** in Central Asia are surrounded by fertile agricultural hinterlands → **They should drive the intensification of agro-related activities**

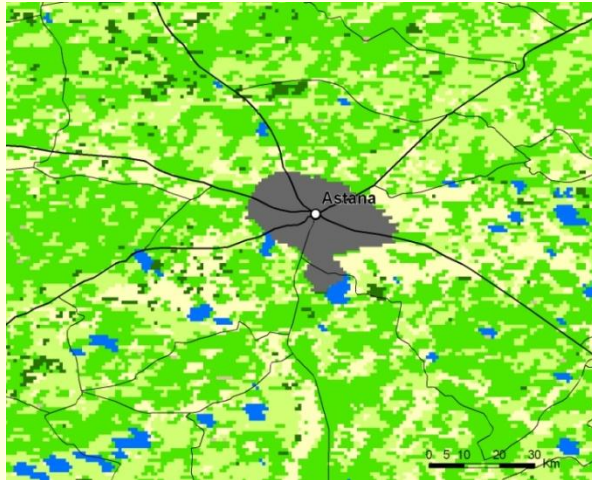
Central Asia has a revealed comparative advantage in some agro-related activities

Products	Average RCA, 2003-2007			Major Markets
	KAZ	KGZ	TJK	
Milk and cream		17.40		KAZ
Buttermilk, curdled milk and cream		11.05		CHN,KAZ,
Cheese and curd.		3.63		CHN,KAZ
Other nuts, fresh or dried		7.62	5.48	RUS,TUR
Grapes, fresh or dried.			17.92	RUS
Apples, pears and quinces, fresh.		3.75		RUS
Apricots, cherries, peaches		9.27		RUS
Other fruit, fresh.			6.47	RUS,IND
Fruit juices (including grape must)			8.39	KAZ,RUS,TUR
Men's or boys' suits, ensembles			9.35	KAZ
Women's or girls' suits, ensembles		5.49		IND,RUS
Women's or girls' blouses		16.02		RUS,TUR
Misc. ready products, including clothing patterns		2.53		KAZ,TUR

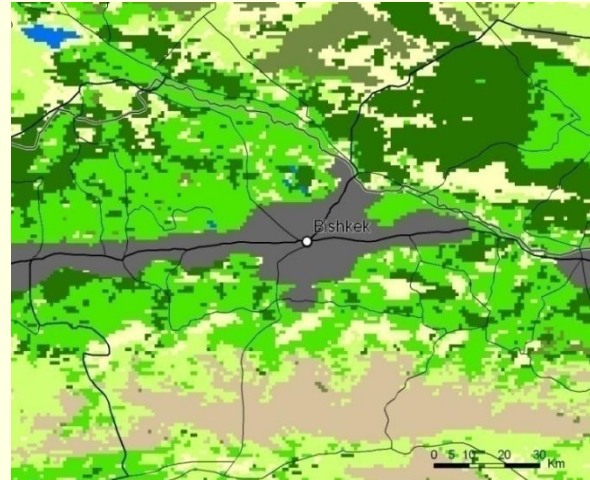
Note: RCA >1 denotes comparative advantage in that product

Leading cities are surrounded by fertile agricultural hinterlands

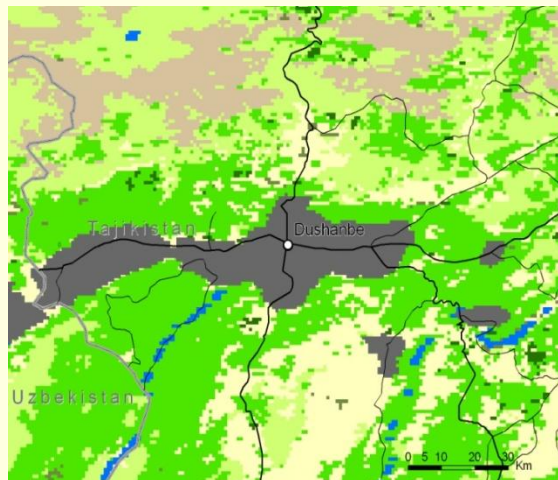
Land Cover around Astana, KZ



Land Cover around Bishkek, KG



Land Cover around Dushanbe, TJ



- Urban
- Cropland or pasture
- Agriculture with other vegetation
- Other vegetation
- Forest
- Grassland
- Non-vegetated
- Water



Why connect with regional markets?

Why regional markets?

- Regional integration can help address supply constraints such as timely availability of quality and quantity raw materials
 - Global integration, starting with leading regional markets nearby such as China, India, Russia, Turkey can provide access to a larger demand
- For a successful regional integration: Start small, Think global and Compensate the least fortunate (WDR2009)

Start small, think global: the North-South road corridor, an integration vector to scale up regional supply capacity and connect to global markets



Compensate the least fortunate: unleashing the regional hub potential of Almaty

Estimated carriage costs between Almaty and major regional markets by different modes of transport, 2009

Item	Destination			
	Delhi	Istanbul	Moscow	Urumqi
Airfreight (USD per 1 kilogram) ^a	2	1.90	2.20	2
Number of carriers	2	2	3	1
Available tonnage per week (tons)	20+	20+	20+	20+
Dry trucks hauling up to 20 tons (USD/load)	n.a.	5,500	4,000	5,000
Refrigerated trucks hauling less than 20 tons (USD/load)	n.a.	6,500	4,500	6,000
Rail (dry), 24 tons in 20-foot container (USD/container)	n.a.	4,000	2,000	1,500
Rail, 55-ton load in 1 wagon (USD/wagon)	20,000	n.a.	n.a.	n.a.
Cost of storage at point of departure (Almaty) (USD/m ² /month)	n.a.	5-9	n.a.	n.a.
Processing fees (USD)	n.a.	0-200	n.a.	n.a.
Customs fees for export (USD)	n.a.	50-500	n.a.	n.a.
Bribes (USD)	n.a.	300-1,000	n.a.	n.a.
Other costs and fees	n.a.	0-50	n.a.	n.a.

Source: Data from Global Development Solutions 2009.

n.a. = Not available.

^a Costs are approximations.



How to make it happen?

How to make it happen?

Policy actions needed in all three countries

Instruments	Economic geography dimensions		
	Urban level (city)	Area level (city-hinterland)	Regional level (city-markets abroad)
Institution	Remove restrictions on services (finance; telecom; logistics and warehousing; business/professional services)	Strengthen Oblast-level administration to facilitate/coordinate leading city-hinterland economic interactions	Establish North-south corridor management institution Develop regulations to promote regional freight consolidation services
Infrastructure	Invest in relevant infrastructure (urban transportation, water and sewage system, heating system, electricity)	Improve road connections between leading city and hinterland	Improve road legs of the North-South corridor in need of repair Improve road legs connecting the North-South corridor to China
Incentive	Establish some form of Special Economic Zone (SEZ) in the two leading cities	Develop a market information system (prices, quantities, locations)	Advantageous backhaul cargo services offered by Kazakh trucks to Kyrgyz and Tajik traders

The World Bank can
replicate this study for
Armenia-Georgia