## Product Selection and Dialogue for Structural Transformation

## Private-public dialogue How can we choose?

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What limits the capacity of monkeys to jump? Why some countries could diversify the economies, but others not?

#### Hypothesis:

Lack of (or poor) Public/Private Cooperation and Dialogue

### **Transformation requires Public/Private Dialogue**

How to provide highly specific, high dimensional public inputs that are complements in private production?

#### **Private inputs**

- Prices: information
- Profit-motivated firms: incentives
- Capital markets: move resources

#### **Public inputs**

- No price: where to get the information?
- What are the incentives? Political?
- Even with incentives, how would resources move?

#### Public / Private Cooperation

**Exchange of Information / Shared Risks** 

Private Inputs Information, Incentives, Resources

Public Inputs

In the absence of coordination, monkeys can only jump to trees that require inputs that are already present

## **Central Asia in the "Sophistication-Open Forest**" space

High Ease to jump to new products: open forest

Low

#### **Opportunities**

#### **Parsimonious industrial** policy Help jump short distances to other products

#### Don't do anything

#### System works

Ample space to move in all directions

#### Worst case Central Asia

#### **Strategic bets**

Little space to improve quality and few nearby trees

#### **Competitiveness policy**

Make it better

Improve the conditions of the sectors that already exist

High

#### Low

**Current level of export sophistication** 

#### **Key Principles of the Dialogue**

#### Focus on products

each product (or narrowly defined product category) needs specific capabilities, including public inputs. Only the firms that produce the same product will be interested in discussing with the public sector the specific public goods that they need;

#### Focus on public inputs

identify product-specific missing public inputs, the provision of which could help firms increase productivity;

Focus on clear objectives

initiate the dialogue with a clear export objective.

#### How to "choose" <u>new</u> Products for Public / Private Dialogue?

Step 1: Classifying products into three categories: "nearby", "middle" and "far away" in terms of relative similarity in required capabilities

Step 2: Choose products with higher sophistication than the ones you export now ("direct effect" on the country's overall sophistication level)

Step 3: Choose products with high "spill-over effect" on the country's overall sophistication level

This can be combined with data on employment intensity

#### **Nearby & High Strategic Value**

Strategic value

**<u>Step 1</u>**: Choose "nearby" products Inverse of density  $< \mu - 0.5\sigma$ 

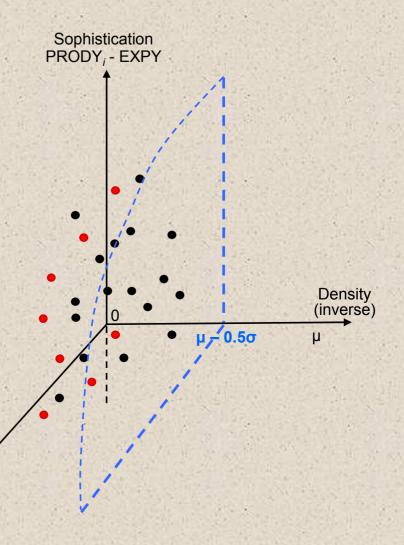
**Step 2**: Choose products with positive "sophistication"

 $PRODY_i - EXPY > 0$ 

→ "direct" impact on EXPY

**Step 3**: Choosing the 20 products with the highest "strategic value

→ <u>"indirect (spillover) effect on EXPY</u>



## **Product lists**



#### **Next Steps**

- Structural transformation is a policy induced process.
- You have the list of unexploited products for your country.
- Undertake pilots (public and private dialogue) for specific products with the objective of finding out specific missing public inputs.

#### Key questions:

- What type of dialogue do you need to undertake?
- Once you find out the missing public inputs, how can you design industrial support policies?

## Two dimensions of uncertainty in the search for new exports

#### **Productivity Uncertainty**

- What will production costs be?
- What level of quality can be achieved?

#### **Demand Uncertainty**

- What are the characteristics of foreign demand?
- What market will the product compete in?
- What price will it garner?

While there are varying degrees of uncertainty present in each product, they can be categorized in terms of these two dimensions

#### Implications for the dialogue

- A country that has experience in similar goods can reduce uncertainty, and therefore new discoveries will be more likely to emerge if they are similar to what is currently produced in the country
- Analysis of the linkages between products must be done at a highly disaggregated product level
- Multidimensionality of this similarity implies that one particular dimension can not be chosen *a priori*



What type of dialogue do we need?

#### **Product-specific public goods**

- "General" public goods
- "Product-specific" public goods

Why do we need to focus on product specific public goods? "<u>Capabilities</u>"

"New" products do not have large and contemporaneous constituencies of producers to lobby the Government for the provision of that "missing public input"

As a result, the provision of product-specific publicgoods to support firms' "discovery" of "new" products can not easily be complete in any country.

## Dialogue for identifying missing public inputs: Traps to be avoided

**Trap 1** - <u>to meet private sector stakeholders (firms) from</u> <u>different economic sectors</u>, instead of firms trying to succeed in the very same product category.

**Trap 2** - to initiate the consultation processes without a clear export objective, by for example asking the private sector stakeholders to list (rank/discuss) "*problems*" they have; instead of structuring the whole discussion around how to export new and more sophisticated products.

**Trap 3** – to fail to state upfront that the Government is not looking to subsidize private goods, but instead to identify product-specific public inputs that may be missing.

#### Principles for designing industrial support

Sunset clauses **Clear objectives** Flexibility to adjust Performance Cost recovery indicators Monitoring & evaluation Simple design Stakeholder mechanisms consultation & participation Exit strategies Targeted

#### **Industrial Policy in Korea**

- 5-year economic development plans started in 1962:
  (i) 5-year Economic Development Plans
  (ii) Monthly Meetings (Presided by the President)
- Export success was the single criterion of performance
- Discussions focusing on changing IP started in 1978 (e.g., eliminating picking the winners)
- In 1986, the Industry Promotion Act was passed. It replaced 7 sector-specific promotion acts
- Collective consensus; trial and error; public-private partnership; coherence

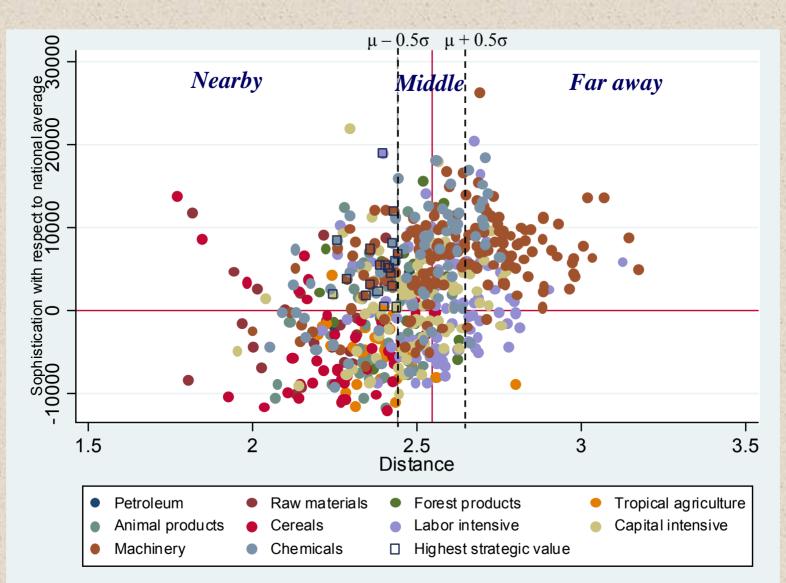
# Discussion, next steps and output of this research program

- 1. Review and assess current practices of government support
  - Provide analysis of subsidies, tax breaks, etc. in the context of best practice principles
- 2. Decide which <u>new products to go into: combination of</u> "nearby", "middle" and "far away"
- 3. Undertake pilots for dialogue with a sample of products
  - Identify target firms
- 4. Undertake market analysis of the products
- 5. Identify missing public goods
- 6. Write down action plans
  - Comprehensive report
- 7. Present to Government authorities
- 8. Institutionalize procedure and undertake further rounds

# Thank you



Kazakhstan





# **Case A: Nearby**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
6647	Safety glass consisting of toughened or laminated glass, cut or not	32,232	18,509	27.18
8822	Photographic film, plates and paper (other than cinematograph film)	25,192	17,685	16.62
5331	Other colouring matter; inorganic products use as luminophores	21,690	17,823	131.70
5162	Aldehyde, ketone and quinone-function compounds	21,335	18,523	10.87
7372	Rolling mills, rolls therefor, and parts, nes of rolling mills	20,642	19,199	484.69
7188	Engines and motors, nes (wind, hot air engines, water wheel, etc)	19,982	19,569	1,690.90
5922	Albuminoid substances; glues	19,195	17,511	199.69
7371	Metallurgy and metal foundry equipment, and parts thereof, nes	18,749	18,527	230.66
7211	Agricultural and horticultural machinery for soil preparation, etc	18,689	18,789	604.02
6644	Glass, cast, rolled, etc, surface-ground, but no further worked	18,386	17,745	45.37
8731	Gas, liquid and electricity supply or production meters; etc	18,344	17,907	2,360.77
7362	Metal forming machine-tool	17,699	17,754	3,857.36
7919	Railway track fixtures, and fittings, etc, parts nes of heading 791	17,002	18,144	501.87
7283	Other mineral working machinery; and parts thereof, nes	16,388	17,735	9,340.47
7129	Parts, nes of steam power units	16,237	19,617	139.34
6794	Castings of iron or steel, in rough state	15,590	18,088	2,039.60
6782	Seamless tubes, pipes; blanks for tubes and pipes, of iron or steel	15,112	17,516	3,019.58
6577	Wadding, wicks and textiles fabrics for use in machinery or plant	15,086	17,973	72.00
730	Chocolate and other preparations containing cocoa, nes	13,697	18,515	1,781.54
6783	Other tubes and pipes, of iron or steel	13,633	17,389	7,903.77



## Case B: Middle

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7413	Industrial and laboratory furnaces and ovens, etc, parts, nes	30,097	21,153	1,157.86
5148	Other nitrogen-function compounds	29,237	20,107	98.44
6418	Paper and paperboard, coated, impregnated, etc, in rolls or sheets	28,853	20,080	134.99
7368	Work holders, dividing heads for machine-tools, etc; tool holders	25,779	20,002	35.81
7439	Parts, nes of the machines falling within headings 7435 and 7436	24,740	19,498	13.77
7492	Cocks, valves and similar appliances, for pipes boiler shells, etc	23,882	21,212	12,957.46
7429	Parts, nes of pumps and liquids elevators falling in heading 742	23,548	20,690	517.28
6632	Abrasive power or grain, on a base of woven fabrics	23,346	19,807	12.92
7212	Harvesting and threshing machines; fodder presses, etc; parts nes	21,071	19,634	1,061.06
6635	Wool; expanding or insulating mineral materials, nes	20,990	19,945	1,251.95
8932	Plastic sanitary and toilet articles	20,877	19,541	20.46
7849	Other parts and accessories, for vehicles of headings 722, 781-783	20,156	21,317	5,510.31
7732	Electrical insulating equipment	20,135	20,134	290.23
5137	Monocarboxylic acids and their derivatives	19,942	19,633	9.96
8121	Central heating equipment, not electrically heated, parts, nes	19,571	19,919	948.81
5335	Glazes, driers, putty etc	18,594	20,321	1,361.47
6289	Other articles of rubber, nes	17,727	20,177	378.68
6785	Tube and pipes fittings, of iron or steel	17,090	20,868	2,445.31
6940	Nails, screws, nuts, bolts, rivets, etc, of iron, steel or copper	16,762	20,106	434.28
6996	Miscellaneous articles of base metal	16,645	20,078	353.18

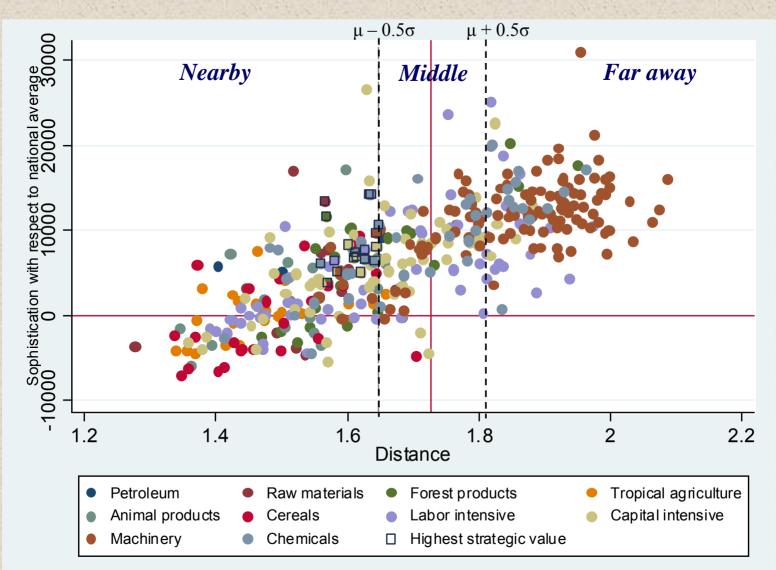


# **Case C: Far away**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7412	Furnace burners; mechanical stokers, etc, and parts thereof, nes	39,521	18,200	675.14
7499	Other non-electric parts and accessories of machinery, nes	28,754	17,826	1,289.06
5332	Printing inks	27,328	18,016	42.50
7263	Machinery, accessories for type-setting, for printing blocks, etc	25,271	18,047	141.23
7269	Parts, nes of machines falling within headings 72631, 7264, 7267	24,643	19,283	13.87
7267	Other printing machinery; machines for uses ancilliary to printing	24,538	20,173	28.68
5823	Alkyds and other polyesters	24,239	20,711	38.37
8742	Drawing, marking-out and mathematical calculating instruments, etc	23,015	17,938	2,104.01
7416	Machinery, plant, laboratory equipment for heating and cooling, nes	22,802	19,053	944.44
7369	Parts, nes of and accessories for machine-tools of heading 736	22,673	19,267	488.97
5825	Polyurethanes	22,131	18,360	9.80
7169	Parts, nes, of rotating electric plant	20,347	17,832	792.82
5983	Organic chemical products, nes	19,743	18,695	31.48
7783	Automotive electrical equipment; and parts thereof, nes	18,812	19,846	2,086.92
8989	Parts, nes of and accessories for musical instruments; metronomes	18,574	17,572	0.17
7784	Electro-mechanical hand tools, and parts thereof, nes	18,544	18,017	12.04
7431	Air pumps, vacuum pumps and air or gas compressors	18,388	19,353	749.67
6991	Locksmiths wares, safes, etc, and hardware, nes, of base metal	17,675	18,514	29.25
7721	Switches, relays, fuses, etc; switchboards and control panels, nes	16,544	17,458	6,384.94
8952	Pens, pencils and, fountain pens	14,729	18,574	4.74



#### Kyrgyz Rep.





# **Case A: Nearby**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7272	Other food-processing machinery and parts thereof, nes	22,863	15,015	95.09
5417	Medicaments (including veterinary medicaments)	22,803	15,449	252.52
6842	Aluminium and aluminium alloys, worked	22,084	14,960	67.91
6417	Paper and paperboard, creped, crinkled, etc, in rolls or sheets	20,183	15,139	0.04
5922	Albuminoid substances; glues	19,195	15,280	281.61
8731	Gas, liquid and electricity supply or production meters; etc	18,344	15,876	25.44
6911	Structures and parts of, of iron, steel; plates, rods, and the like	16,897	16,088	197.19
6996	Miscellaneous articles of base metal	16,645	17,790	122.81
6652	Glassware (other than heading 66582), for indoor decoration	16,358	15,665	85.22
6428	Articles of paper pulp, paper, paperboard or cellulose wadding, nes	16,050	15,223	29.02
6794	Castings of iron or steel, in rough state	15,590	15,724	126.26
6912	Structures and parts of, of aluminium; plates, rods, and the like	15,304	14,705	18.03
5834	Polyvinyl chloride	15,191	15,114	92.54
142	Sausages and the like, of meat, meat offal or animal blood	15,114	14,872	0.74
6577	Wadding, wicks and textiles fabrics for use in machinery or plant	15,086	15,950	9.57
8211	Chairs and other seats; and parts thereof, nes	14,998	15,022	142.67
5542	Organic surface-active agents, nes	14,744	14,772	55.01
730	Chocolate and other preparations containing cocoa, nes	13,697	16,251	873.07
6783	Other tubes and pipes, of iron or steel	13,633	15,436	6.24
6351	Wood packing cases, boxes, cases, crates, etc, complete	12,394	14,755	0.60



## Case B: Middle

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7449	Parts, nes of the machinery falling within heading 7442	22,860	17,073	9.29
7212	Harvesting and threshing machines; fodder presses, etc; parts nes	21,071	17,262	107.39
6635	Wool; expanding or insulating mineral materials, nes	20,990	17,629	79.62
8932	Plastic sanitary and toilet articles	20,877	17,222	10.68
7414	Non-domestic refrigerators and refrigerating equipment, parts, nes	20,836	16,894	160.50
7372	Rolling mills, rolls therefor, and parts, nes of rolling mills	20,642	16,719	23.56
5821	Phenoplasts	20,451	16,950	18.58
8121	Central heating equipment, not electrically heated, parts, nes	19,571	17,516	195.04
8939	Miscellaneous articles of plastic	19,237	17,605	467.95
6210	Materials of rubber	18,703	17,117	10.50
7211	Agricultural and horticultural machinery for soil preparation, etc	18,689	16,536	11.66
5335	Glazes, driers, putty etc	18,594	18,113	93.35
5822	Aminoplasts	17,911	16,923	23.70
6953	Other hand tools	17,780	16,683	32.84
6289	Other articles of rubber, nes	17,727	17,885	30.19
6998	Articles, nes, of copper, nickel, aluminium, lead, zinc and tin	17,147	16,736	14.81
6997	Articles of iron or steel, nes	17,130	18,612	215.91
6785	Tube and pipes fittings, of iron or steel	17,090	18,578	16.70
6940	Nails, screws, nuts, bolts, rivets, etc, of iron, steel or copper	16,762	17,796	116.40
7868	Other not mechanically propelled vehicles; and parts, nes	16,297	17,291	106.24

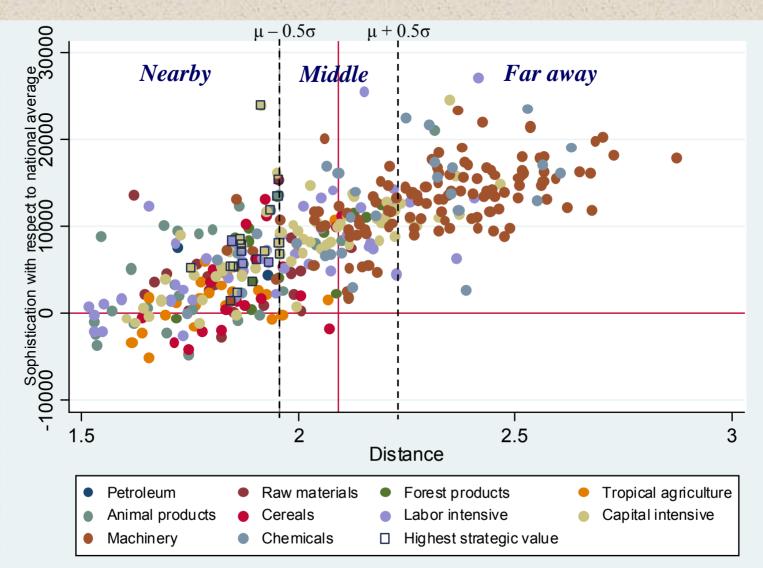


# **Case C: Far away**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
6418	Paper and paperboard, coated, impregnated, etc, in rolls or sheets	28,853	17,747	8.49
7259	Parts, nes of the machines falling within heading 725	27,116	16,873	2.78
7439	Parts, nes of the machines falling within headings 7435 and 7436	24,740	16,934	13.50
7267	Other printing machinery; machines for uses ancilliary to printing	24,538	17,666	5.74
5823	Alkyds and other polyesters	24,239	18,284	1.71
7492	Cocks, valves and similar appliances, for pipes boiler shells, etc	23,882	18,759	7.91
7219	Agricultural machinery and appliances, nes, and parts thereof, nes	23,572	16,513	9.16
7429	Parts, nes of pumps and liquids elevators falling in heading 742	23,548	18,377	58.29
7416	Machinery, plant, laboratory equipment for heating and cooling, nes	22,802	17,009	326.83
7369	Parts, nes of and accessories for machine-tools of heading 736	22,673	17,042	12.07
6954	Interchangeable tools for hand or machine tools (tips, blades, etc)	21,608	16,952	98.42
7493	Shaft, crank, bearing housing, pulley and pulley blocks, etc	21,376	16,882	447.53
7491	Ball, roller or needle roller bearings	20,798	16,613	12.40
7732	Electrical insulating equipment	20,135	17,543	15.32
5137	Monocarboxylic acids and their derivatives	19,942	16,922	1.71
7783	Automotive electrical equipment; and parts thereof, nes	18,812	17,147	8.97
7431	Air pumps, vacuum pumps and air or gas compressors	18,388	16,996	50.31
6991	Locksmiths wares, safes, etc, and hardware, nes, of base metal	17,675	16,493	189.45
7436	Filtering and purifying machinery, apparatus for liquids and gases	17,603	16,648	204.67
8952	Pens, pencils and, fountain pens	14,729	16,557	48.16



### Mongolia





# **Case A: Nearby**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
6760	Rails and railway track construction materials, of iron or steel	30,687	14,445	12.69
6842	Aluminium and aluminium alloys, worked	22,084	15,925	16.62
6417	Paper and paperboard, creped, crinkled, etc, in rolls or sheets	20,183	16,041	0.55
240	Cheese and curd	18,561	15,574	93.46
6519	Yarn of textile fibres, nes	15,194	15,687	26.99
8211	Chairs and other seats; and parts thereof, nes	14,998	15,980	199.22
6542	Fabrics, woven, 85% plus of sheep's or lambs' wool or of fine hair	14,807	15,073	19.24
6514	Yarn 85% of synthetic fibres, not for retail; monofil, strip, etc	14,569	14,961	4.00
6973	Domestic, non-electric, heating, cooking apparatus, and parts, nes	13,849	15,562	14.13
8219	Other furniture and parts thereof, nes	13,763	15,077	515.73
6924	Cask, drums, etc, of iron, steel, aluminium, for packing goods	13,490	14,374	14.49
484	Bakery products	12,926	14,294	0.26
8931	Plastic packing containers, lids, stoppers and other closures	12,477	15,646	267.71
6351	Wood packing cases, boxes, cases, crates, etc, complete	12,394	15,697	19.82
6517	Yarn of regenerated fibres, not for retail, monofil, strip, etc	12,123	15,564	0.07
6359	Manufactured articles of wood, nes	12,078	14,710	3.33
6512	Yarn of wool or animal hair (including wool tops)	11,906	14,680	214.66
6421	Packing containers, box files, etc, of paper, used in offices	10,385	14,589	4.55
8122	Ceramic plumbing fixtures	9,093	14,535	0.06
7731	Insulated electric wire, cable, bars, etc	8,125	15,577	29.60



## Case B: Middle

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
6975	Base metal indoors sanitary ware, and parts thereof, nes	21,462	17,159	2.12
8922	Newspapers, journals and periodicals	21,055	17,676	1.42
8932	Plastic sanitary and toilet articles	20,877	18,306	1.69
6282	Transmission, conveyor or elevator belts, of vulcanized rubber	20,112	18,124	0.02
7188	Engines and motors, nes (wind, hot air engines, water wheel, etc)	19,982	18,489	54.81
8121	Central heating equipment, not electrically heated, parts, nes	19,571	18,491	0.61
8939	Miscellaneous articles of plastic	19,237	18,324	40.57
6210	Materials of rubber	18,703	18,294	2.53
5822	Aminoplasts	17,911	17,911	11.83
6953	Other hand tools	17,780	17,771	7.93
6992	Chain and parts thereof, of iron or steel	17,555	17,518	33.06
6998	Articles, nes, of copper, nickel, aluminium, lead, zinc and tin	17,147	17,876	28.18
6997	Articles of iron or steel, nes	17,130	19,836	63.66
6785	Tube and pipes fittings, of iron or steel	17,090	19,857	3.10
6996	Miscellaneous articles of base metal	16,645	18,849	26.55
6633	Manufactures of mineral materials, nes (other than ceramic)	16,591	18,098	9.64
7162	Electric motors, generators (not direct current); generating sets	16,320	17,346	20.62
7868	Other not mechanically propelled vehicles; and parts, nes	16,297	18,198	2.70
8952	Pens, pencils and, fountain pens	14,729	17,375	5.12
730	Chocolate and other preparations containing cocoa, nes	13,697	17,387	5.93

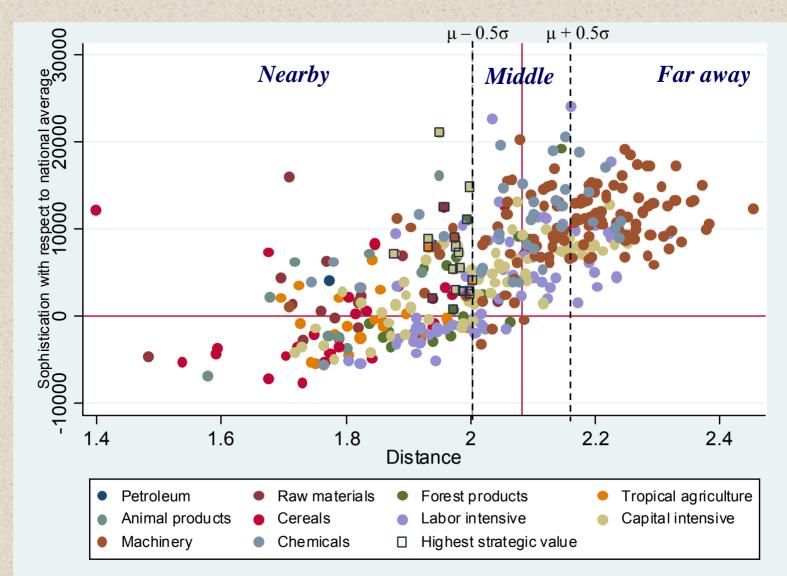


# Case C: Far away

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7413	Industrial and laboratory furnaces and ovens, etc, parts, nes	30,097	19,786	0.34
5148	Other nitrogen-function compounds	29,237	18,105	24.82
7368	Work holders, dividing heads for machine-tools, etc; tool holders	25,779	18,521	0.08
7439	Parts, nes of the machines falling within headings 7435 and 7436	24,740	17,895	0.19
5823	Alkyds and other polyesters	24,239	19,119	69.84
7492	Cocks, valves and similar appliances, for pipes boiler shells, etc	23,882	20,099	209.40
7429	Parts, nes of pumps and liquids elevators falling in heading 742	23,548	19,518	9.10
7449	Parts, nes of the machinery falling within heading 7442	22,860	18,131	4.52
7416	Machinery, plant, laboratory equipment for heating and cooling, nes	22,802	17,729	89.52
6954	Interchangeable tools for hand or machine tools (tips, blades, etc)	21,608	18,025	7.01
7493	Shaft, crank, bearing housing, pulley and pulley blocks, etc	21,376	17,792	267.55
5821	Phenoplasts	20,451	18,058	0.00
7849	Other parts and accessories, for vehicles of headings 722, 781-783	20,156	19,949	728.89
7732	Electrical insulating equipment	20,135	18,803	2.95
7783	Automotive electrical equipment; and parts thereof, nes	18,812	18,394	10.87
5335	Glazes, driers, putty etc	18,594	19,223	12.42
7431	Air pumps, vacuum pumps and air or gas compressors	18,388	18,051	84.59
6289	Other articles of rubber, nes	17,727	19,184	9.76
6940	Nails, screws, nuts, bolts, rivets, etc, of iron, steel or copper	16,762	19,048	197.13
7129	Parts, nes of steam power units	16,237	18,389	9.64



#### **Uzbekistan**





# **Case A: Nearby**

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
6760	Rails and railway track construction materials, of iron or steel	30,687	15,062	1.61
6252	Tires, pneumatic, new, for buses and lorries	24,475	15,092	29.27
6842	Aluminium and aluminium alloys, worked	22,084	16,132	718.08
6413	Kraft paper and paperboard, in rolls or sheets	20,743	14,481	40.00
7211	Agricultural and horticultural machinery for soil preparation, etc	18,689	17,778	41.57
6931	Wire, cables, cordage, ropes, plaited bans, sling and the like	18,478	14,397	733.18
6745	Sheet, plates, rolled of thickness 3mm to 4,75mm, of iron or steel	17,602	15,900	14.93
2331	Synthetic rubber, latex; factice derived from oils	17,492	15,387	835.20
6251	Tires, pneumatic, new, for motor cars	16,903	16,065	15.90
6747	Tinned sheets, plates of steel (not of high carbon or alloy steel)	16,821	14,456	0.25
6519	Yarn of textile fibres, nes	15,194	15,955	2.55
6746	Sheet, plates, rolled of thickness less 3mm, of iron or steel	14,975	16,827	115.85
730	Chocolate and other preparations containing cocoa, nes	13,697	17,459	21.38
6259	Other tires, tire cases, tire flaps and inner tubes, etc	12,677	15,420	58.29
8931	Plastic packing containers, lids, stoppers and other closures	12,477	15,722	193.58
6351	Wood packing cases, boxes, cases, crates, etc, complete	12,394	15,904	6.15
6611	Lime, quick, slaked and hydraulic (no calcium oxide or hydroxide)	12,378	14,553	104.81
6517	Yarn of regenerated fibres, not for retail, monofil, strip, etc	12,123	15,906	24.50
6822	Copper and copper alloys, worked	11,577	16,682	5,340.52
6421	Packing containers, box files, etc, of paper, used in offices	10,385	14,751	84.40



## Case B: Middle

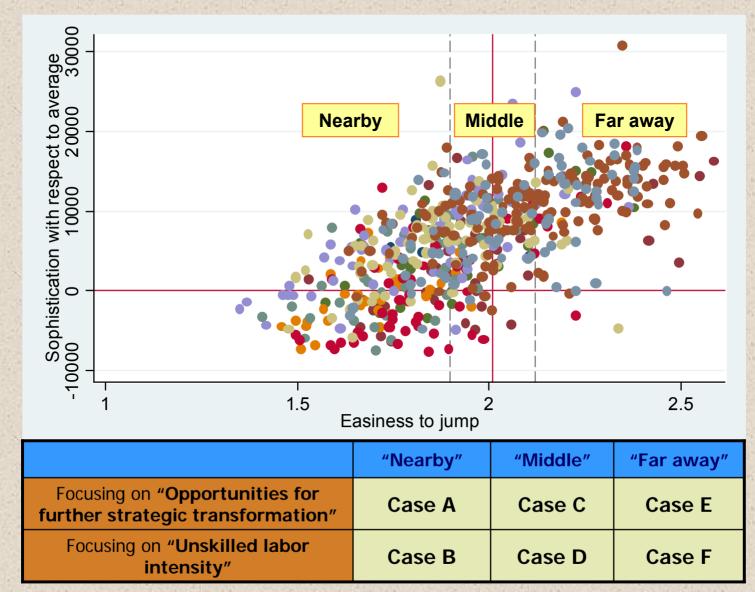
Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
5148	Other nitrogen-function compounds	29,237	18,656	2.49
6418	Paper and paperboard, coated, impregnated, etc, in rolls or sheets	28,853	18,721	1.54
5823	Alkyds and other polyesters	24,239	19,437	5.61
7219	Agricultural machinery and appliances, nes, and parts thereof, nes	23,572	17,591	9.44
7449	Parts, nes of the machinery falling within heading 7442	22,860	18,241	164.19
7441	Work trucks, of the type use in factories, dock areas, etc	22,226	17,733	0.80
8922	Newspapers, journals and periodicals	21,055	17,626	26.85
6635	Wool; expanding or insulating mineral materials, nes	20,990	19,019	46.98
8932	Plastic sanitary and toilet articles	20,877	18,552	11.45
5137	Monocarboxylic acids and their derivatives	19,942	18,276	2,077.60
8121	Central heating equipment, not electrically heated, parts, nes	19,571	18,818	2.92
8939	Miscellaneous articles of plastic	19,237	18,408	3,254.06
7371	Metallurgy and metal foundry equipment, and parts thereof, nes	18,749	17,807	1.54
6210	Materials of rubber	18,703	18,364	86.97
5822	Aminoplasts	17,911	18,263	11.70
6998	Articles, nes, of copper, nickel, aluminium, lead, zinc and tin	17,147	17,805	335.15
6785	Tube and pipes fittings, of iron or steel	17,090	19,979	19.95
6996	Miscellaneous articles of base metal	16,645	19,159	33.79
6633	Manufactures of mineral materials, nes (other than ceramic)	16,591	18,197	511.99
7868	Other not mechanically propelled vehicles; and parts, nes	16,297	18,342	1.92



# Case C: Far away

Code	Commodity	PRODY	Strategic Value	Export Value '000\$ (2005)
7368	Work holders, dividing heads for machine-tools, etc; tool holders	25,779	19,151	10.50
7439	Parts, nes of the machines falling within headings 7435 and 7436	24,740	18,477	34.00
7267	Other printing machinery; machines for uses ancilliary to printing	24,538	19,089	58.21
7492	Cocks, valves and similar appliances, for pipes boiler shells, etc	23,882	20,174	768.16
7429	Parts, nes of pumps and liquids elevators falling in heading 742	23,548	19,796	75.00
7416	Machinery, plant, laboratory equipment for heating and cooling, nes	22,802	18,280	990.42
7369	Parts, nes of and accessories for machine-tools of heading 736	22,673	18,540	20.77
6954	Interchangeable tools for hand or machine tools (tips, blades, etc)	21,608	18,332	115.66
7493	Shaft, crank, bearing housing, pulley and pulley blocks, etc	21,376	18,168	175.94
5821	Phenoplasts	20,451	18,179	21.99
7849	Other parts and accessories, for vehicles of headings 722, 781-783	20,156	20,199	10,295.36
7732	Electrical insulating equipment	20,135	18,988	1.11
7188	Engines and motors, nes (wind, hot air engines, water wheel, etc)	19,982	18,834	132.56
8935	Articles of electric lighting of plastic	19,300	18,972	0.08
7783	Automotive electrical equipment; and parts thereof, nes	18,812	18,390	4.71
5335	Glazes, driers, putty etc	18,594	19,570	28.95
7431	Air pumps, vacuum pumps and air or gas compressors	18,388	18,239	629.25
6289	Other articles of rubber, nes	17,727	19,402	77.30
6997	Articles of iron or steel, nes	17,130	19,785	144.69
6940	Nails, screws, nuts, bolts, rivets, etc, of iron, steel or copper	16,762	19,339	27.55

## Pakistan Classifying products by easiness to jump



Producing a product requires a large number of diverse factors, institutions, etc.: **Capabilities**  $\rightarrow$  e.g. asparagus

- Many of these are sector-specific, but their specificity is relative: *Proximity*
- Moving to new sectors requires adaptation of existing capabilities → path dependency in structural transformation
- Policy implication: options for tomorrow are determined by what exists today. Appropriate policy depends on opportunity set

#### **Capabilities**

Producing asparaguses requires:

- a certain type of soil
- mechanized farming equipment
- agribusinesses firms that know the market, etc.,

#### but also "public goods" such as:

- specific property rights
- port infrastructure
- road system
- cold-storage facilities
- phytosanitary regulations
- market access agreements, etc.

#### Principles for designing industrial support 1-5

*Sunset clauses* An industrial intervention is designed for a fixed period. The industrial initiative will expire after a set time; or will require a review before further use.

*Exit strategies* An industrial intervention is designed with a strategy to exit the industry after a specified time, or after certain milestones are reached.

*Targeted* An intervention is targeted at the specific problem or group of firms requiring assistance, as opposed to broad coverage, regardless of specific industry or firm requirement.

*Clear objectives* A well defined objective with commitment at the outset of the intervention, so that all stakeholders know what the new industrial support initiatives are trying to achieve.

*Performance indicators* Use of indicators in the design and implementation to identify outputs and outcomes.

#### Principles for designing industrial support: 6-10

*Monitoring & evaluation mechanisms* Monitoring is required to measure performance indicators, and evaluation is used to judge if objective(s) have been achieved.

*Cost recovery* Used to separate out committed firms valuing the services or interventions from those seeking a free resource.

*Simple design* The simpler and easier to administrate, the more likely an intervention will work.

*Flexibility to adjust* Frequent changes to interventions or a design that allows no adjustment are both signs of poor design. Ability to fine-tune the intervention after its initial implementation is a good design feature.

*Stakeholder consultation & participation* Good interventions, consultant stakeholders during the design and include their participation in the implementation and evaluation.