



Trade Diversification in the Transition Economies:

Robert C. Shelburne

Economic Commission for Europe





The Macroeconomic Orientation Matters: Trade Balance % of GDP

	2002	2003	2004	2005	2006
Eastern Europe-16	-5.1	-5.2	-5.2	-4.1	-4.9
....Albania	-26.0	-25.3	-22.0	-24.3	-24.1
....Bosnia and Herzegovina	-50.5	-49.0	-44.0	-41.6	-28.7
....Bulgaria	-7.2	-9.6	-11.5	-16.1	-18.6
....Croatia	-10.8	-7.8	-7.3	-7.1	-7.6
....Czech Republic	-2.0	-2.2	-0.5	2.0	1.8
....Estonia	-6.9	-7.4	-7.5	-5.9	-10.3
....Hungary	-2.3	-3.8	-2.7	-0.8	0.7
....Latvia	-10.1	-12.7	-15.8	-14.7	-21.2
....Lithuania	-5.5	-5.9	-7.0	-7.0	-10.3
....Montenegro	0.0	-17.8	-17.1	-17.9	-32.8
....Poland	-3.2	-2.4	-1.8	-0.3	-0.8
....Romania	-5.7	-7.5	-9.2	-10.2	-12.2
....Serbia	-19.6	-20.2	-26.4	-21.2	-19.7
....Slovakia	-6.8	-1.2	-3.1	-3.4	-5.0
....Slovenia	1.4	0.0	-1.2	-0.6	-0.8
....The former Yugoslav Rep	-21.9	-18.5	-21.7	-18.7	-20.1

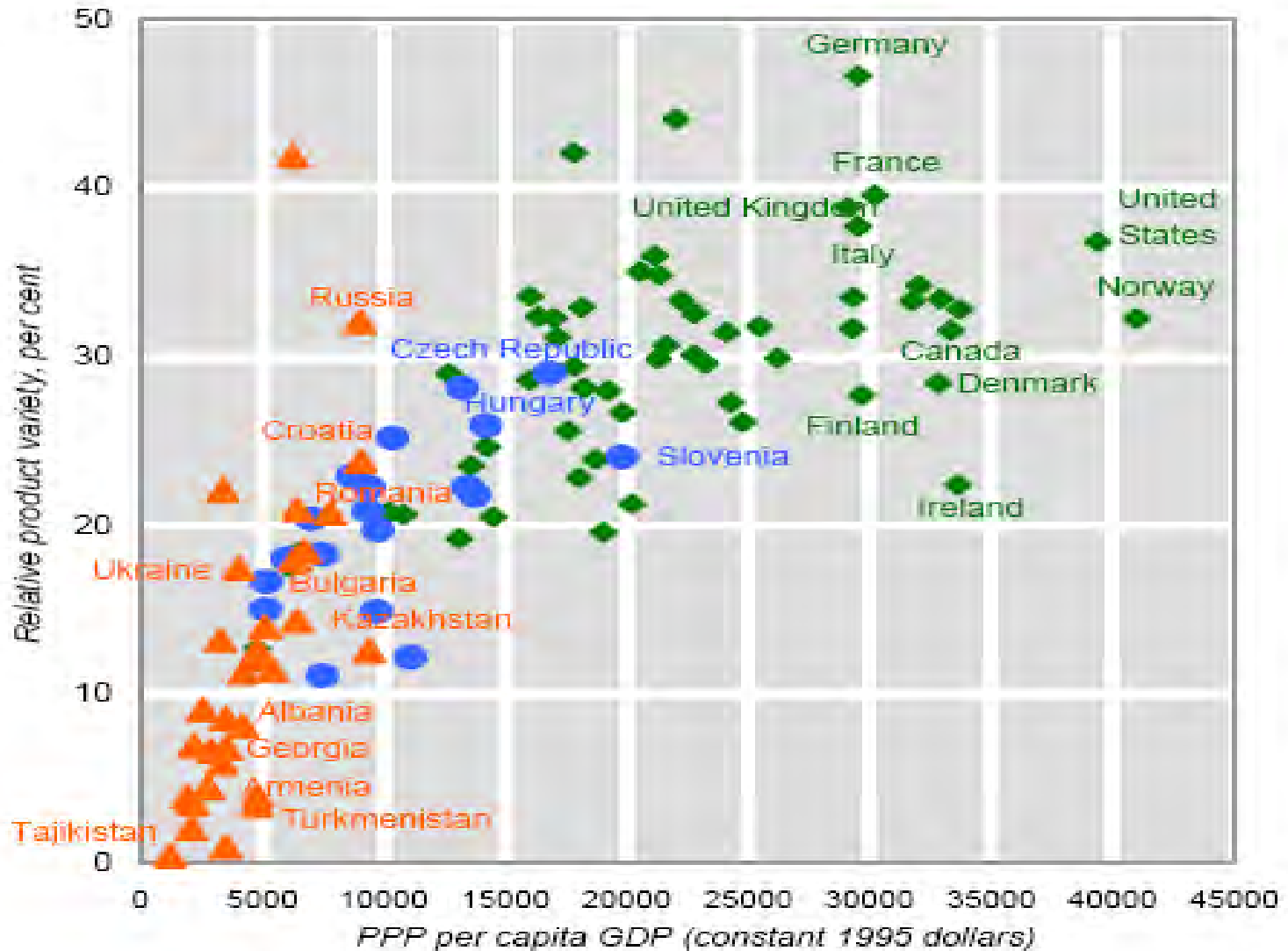


The Macroeconomic Orientation Matters: Trade Balance % of GDP

	2002	2003	2004	2005	2006
CIS	8.0	8.6	10.0	11.0	10.3
....Armenia	-17.3	-17.9	-14.8	-13.2	-15.8
....Azerbaijan	-7.3	-23.5	-23.9	10.0	29.4
....Belarus	-3.3	-3.8	-6.0	0.6	-4.3
....Georgia	-13.2	-14.6	-16.8	-17.8	-23.9
....Kazakhstan	0.0	5.3	8.5	8.8	10.8
....Kyrgyzstan	-5.0	-7.0	-8.4	-18.5	-37.8
....Moldova, Republic of	-25.2	-33.8	-30.0	-40.6	-47.6
....Russian Federation	10.6	11.3	12.4	13.7	12.7
....Tajikistan	-13.2	-9.8	-10.9	-18.5	-25.0
....Turkmenistan	8.5	8.5	3.9	7.6	7.0
....Ukraine	4.4	2.6	7.7	0.8	-2.9
....Uzbekistan	3.4	6.7	6.6	0.0	11.0



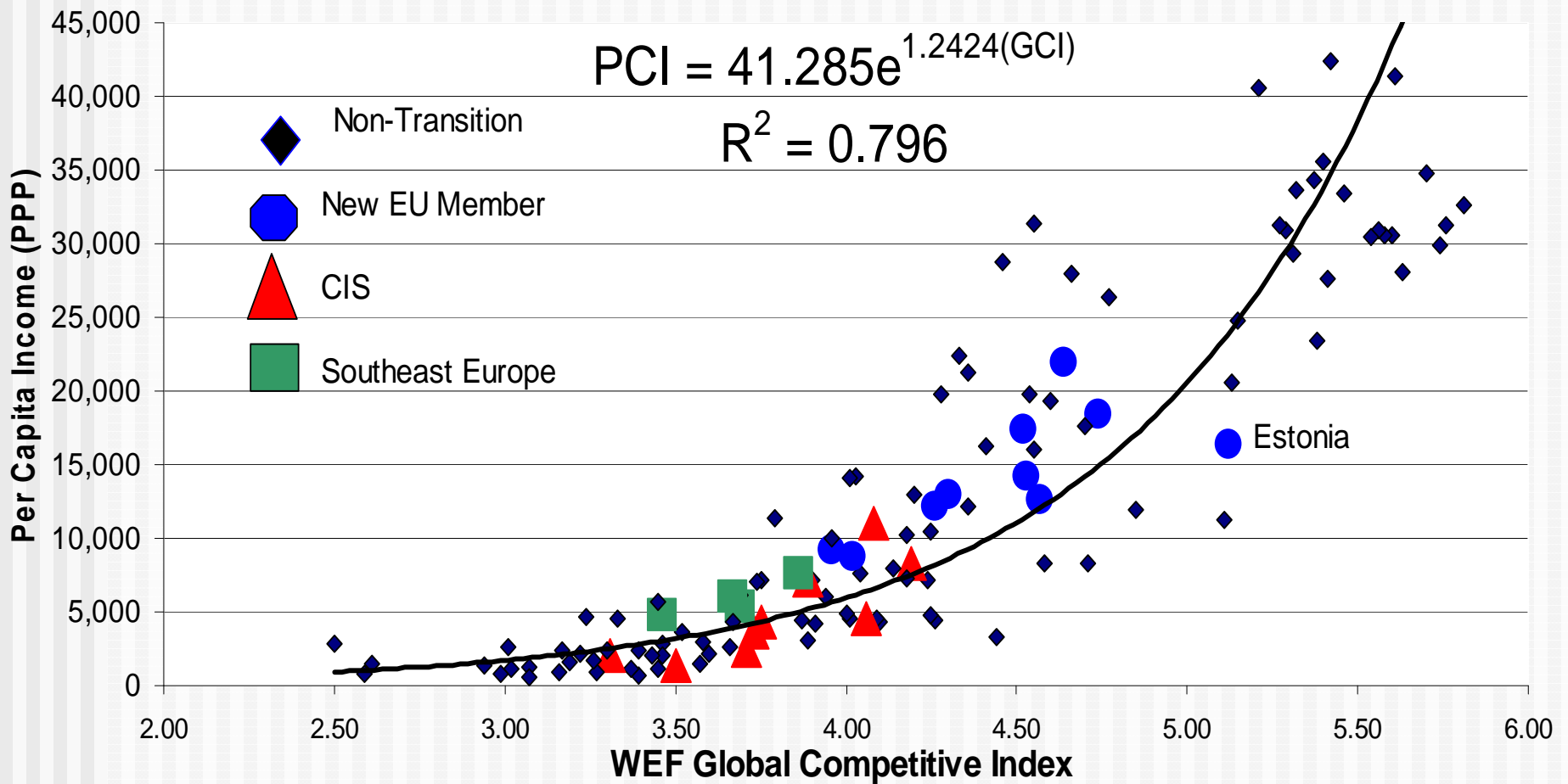
Import Diversification is Important Too





Transition Economies' Competitiveness:

World Economic Forum GCI-2006
Based Upon Over 100 Indicators





Trade Diversification in the Transition Economies: Its Basically About Manufacturing

- What is Diversification: If it's selling (buying) a lot of different products to a lot of different countries, then:
- The title of the conference should have been:
- *Integrating the Economies in Transition into the World Economy by Increasing High Valued-Added Manufactured Exports*
- As a practical matter, you can't have a diversified dynamic middle-income economy without an internationally competitive and sizable manufacturing sector



EVOLVING TRADE PATTERNS IN THE CIS: THE ROLE OF MANUFACTURING

Развитие структуры торговли в СНГ: роль обрабатывающей промышленности

Available as UNECE Discussion Paper 2006.2

www.unece.org

Robert C. Shelburne

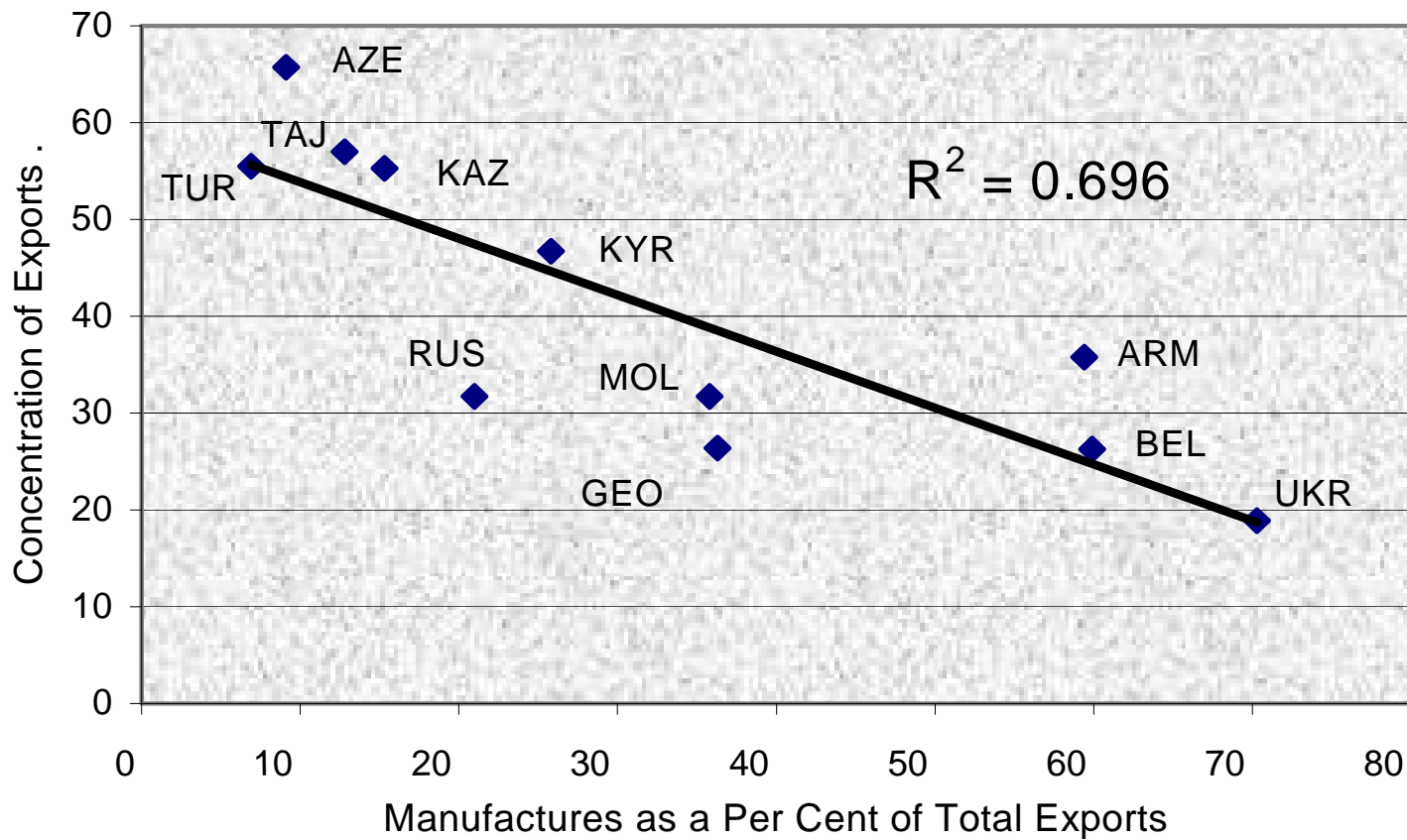
UN Economic Commission for Europe
and

Oksana Pidufala

Brookings Institution

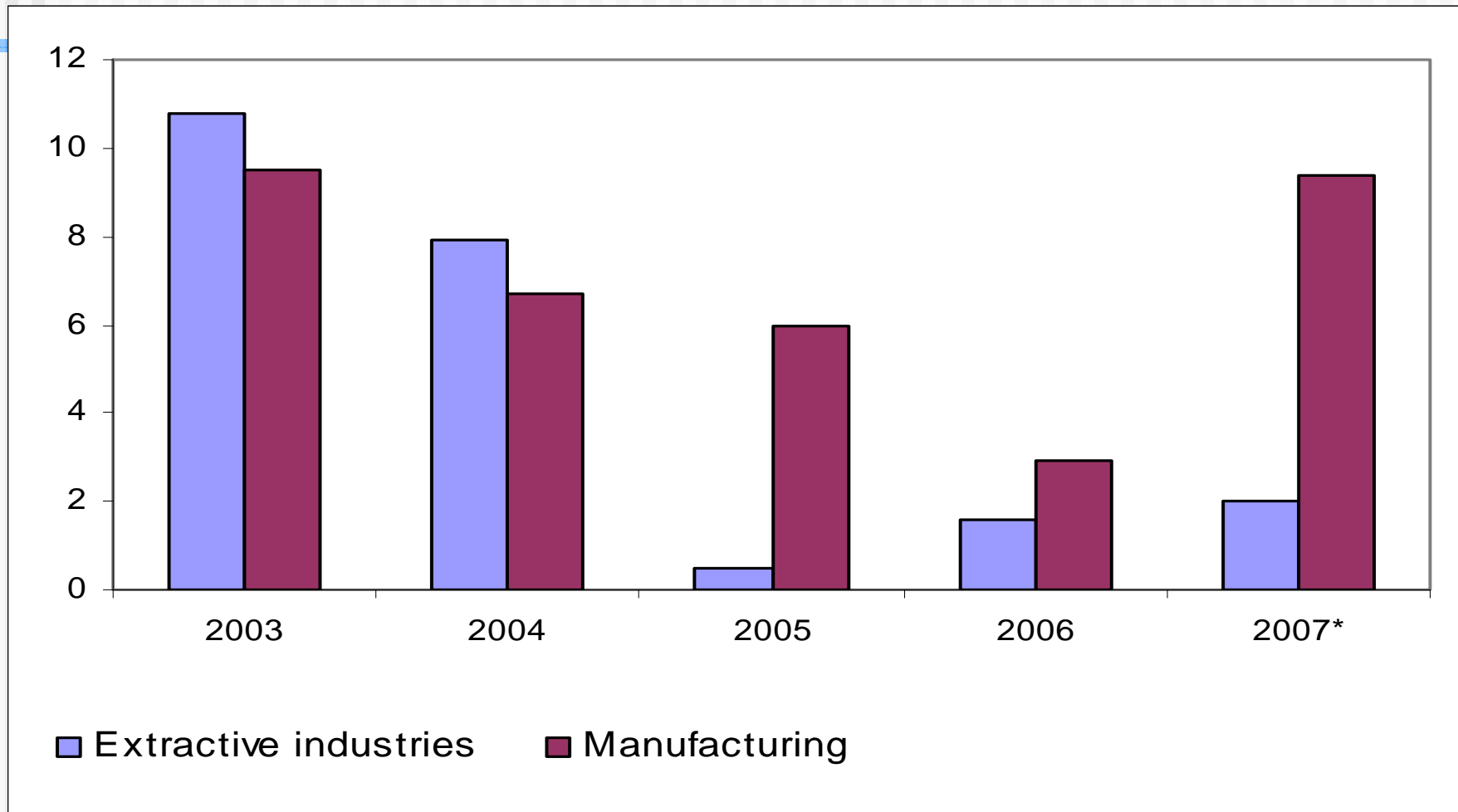


Export Concentration & Manufacturing





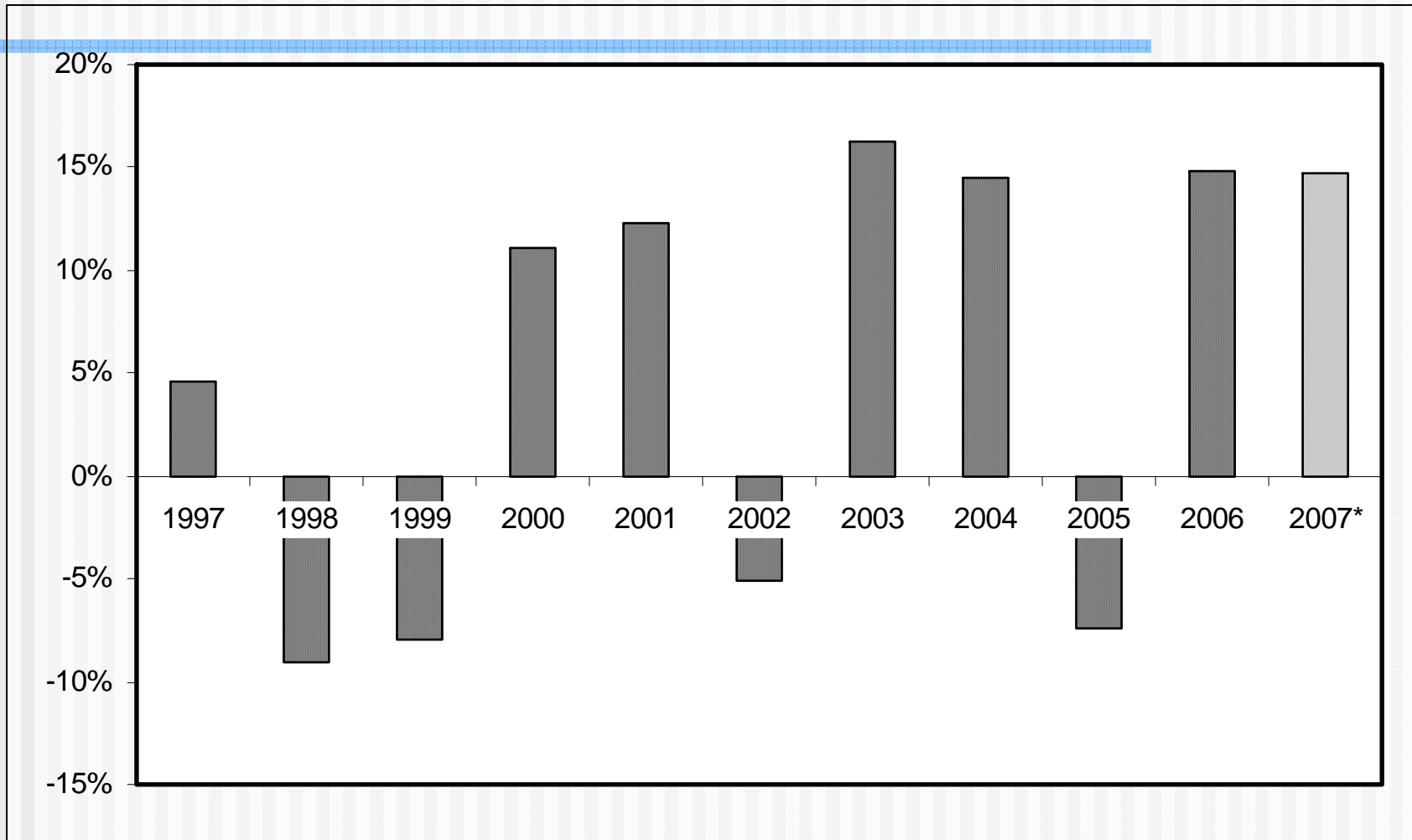
Output growth rates: extractive industries versus manufacturing, 2003-2007



■ Borrowed from Gaidar



Exports of machinery and equipment from Russia, %



■ Borrowed from Gaidar

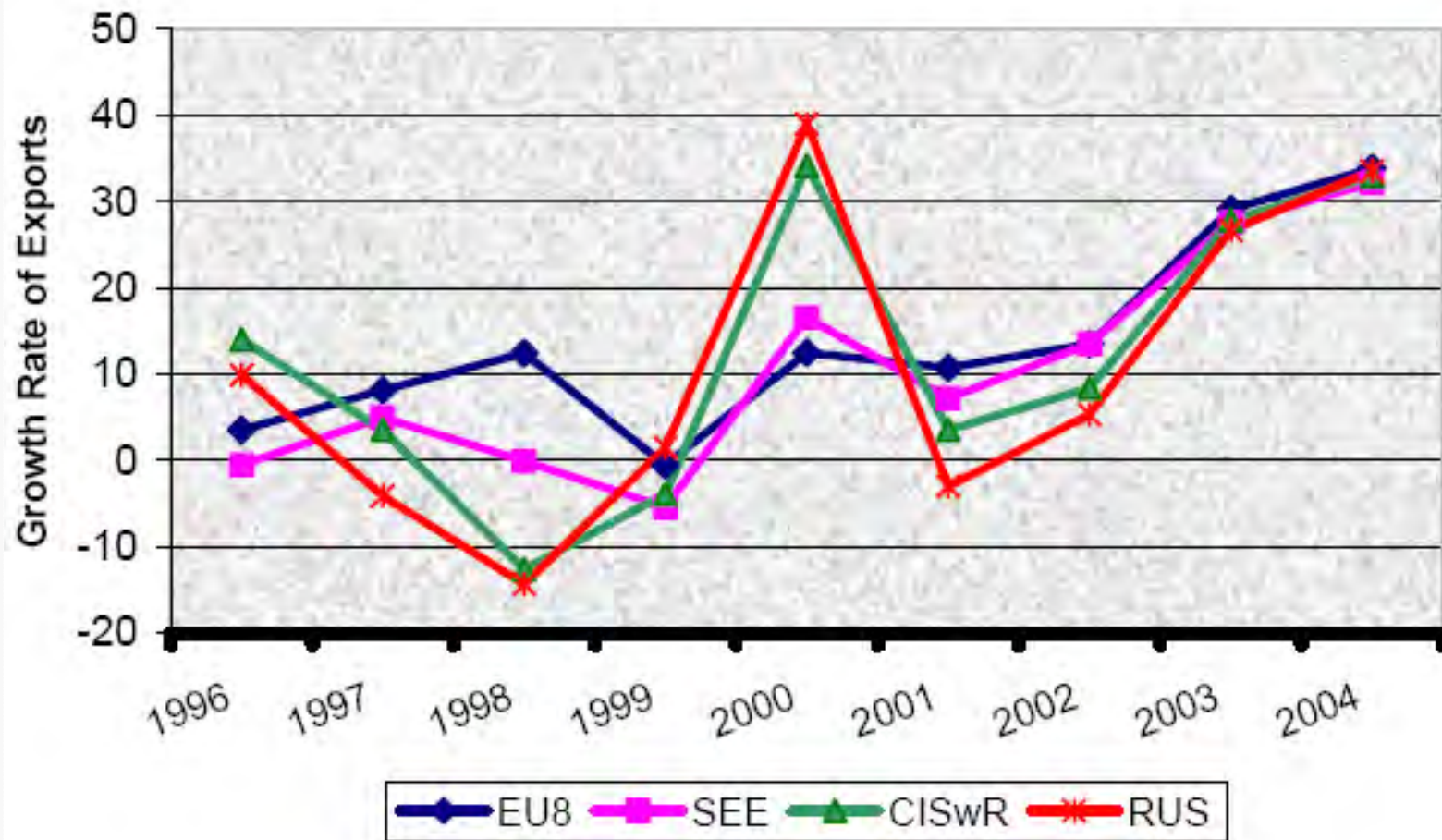


Manufacturing Sector

- Why is manufacturing so weak:
 - Natural resource abundance, so like many developing countries
 - Recently Appreciation and Dutch Disease Effects
 - Small countries not integrated into markets, scale is important
 - Planning, little emphasis on quality and quality is more important for manufacturing
 - The transition destroyed manufacturing and trade so manufactures trade took a double hit
 - Russian Manufactured Value-Added Declined Twice as Much as other GDP during 1993-1998; Capital Investment Hard Hit
 - Manufactures Employment Down 40% (14%)
- Importance of Manufacturing
 - Drives Productivity Growth
 - High Wage Jobs for Semi-skilled Workers

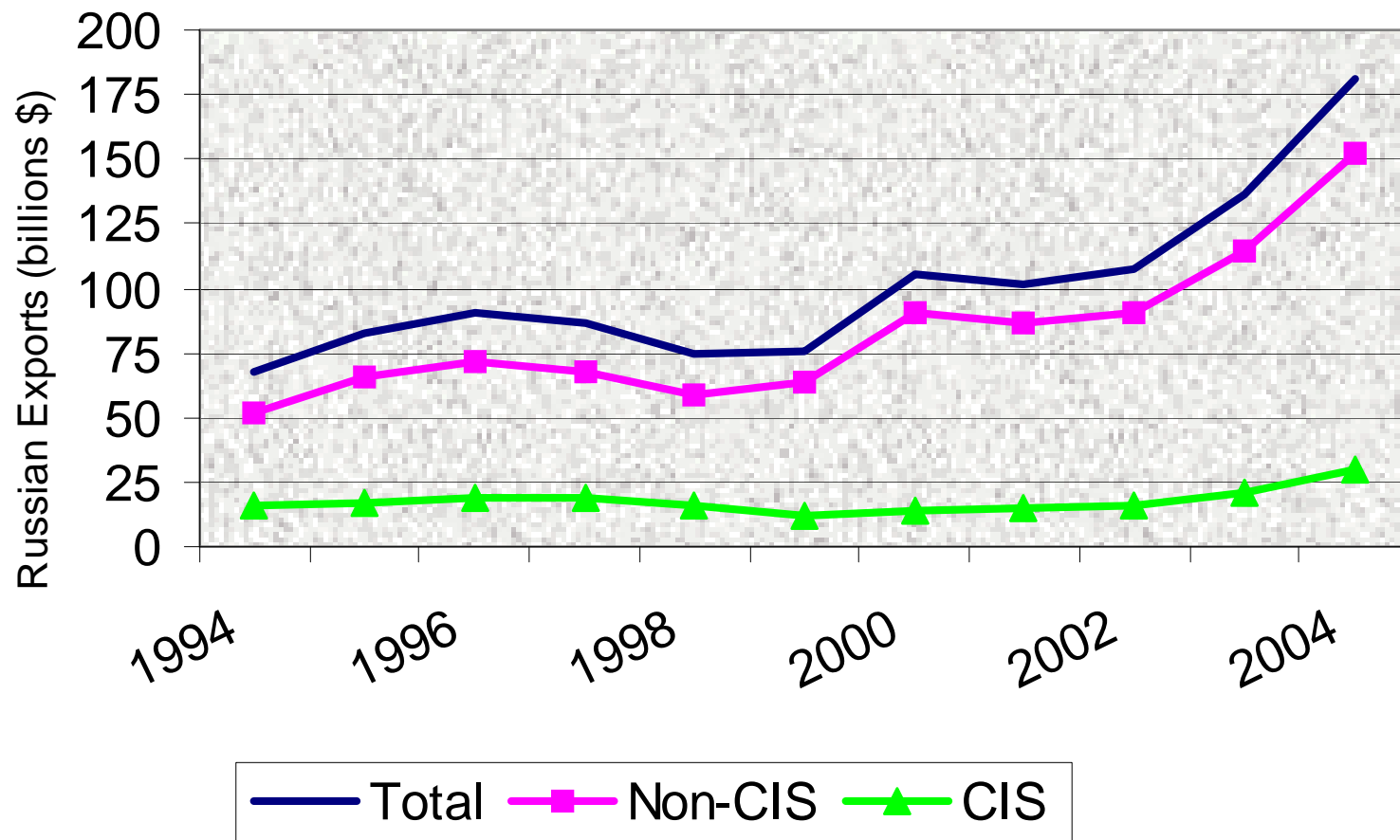


Yearly Export Growth of the Transition Economies





Russian Exports 1994-2004

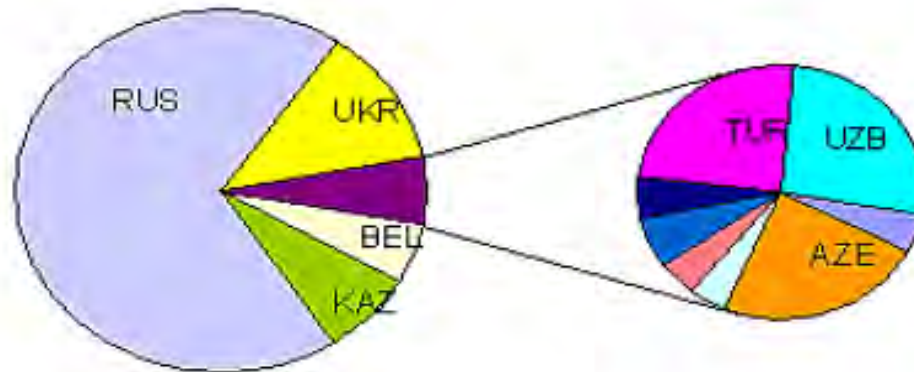




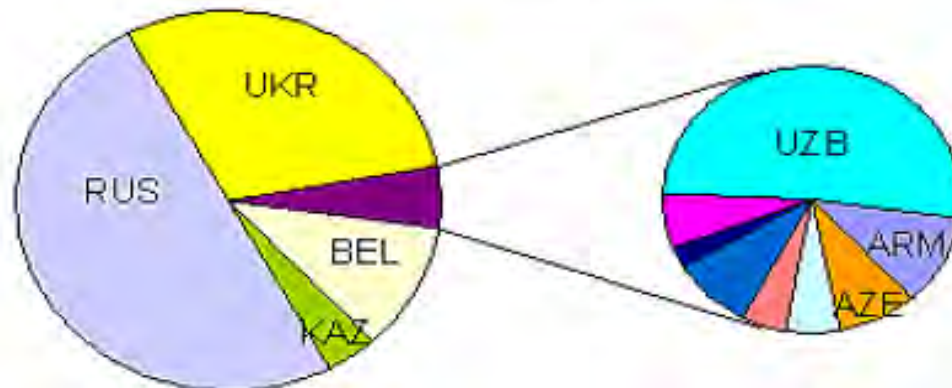
Relative Size

- Armenia
- Georgia
- Republic of Moldova
- Turkmenistan
- Azerbaijan
- Kazakhstan
- Russian Federation
- Ukraine
- Belarus
- Kyrgyzstan
- Tajikistan
- Uzbekistan

Total exports of the CIS



Total manufactured exports of the CIS





Intra-CIS Trade

- Russia Either Largest Export or Import Partner for All Other CIS; Both Largest Export & Import for 4 CIS
- Importance of Other CIS Varies
 - CIS account for 21-87% of Imports
 - CIS account for 16-54% of Exports
- Manufacturing Trade
 - Under-rely on CIS for Imports
 - Over-rely on CIS for Exports



Commodity Composition

- Manufactures 50-75% of Imports
 - Low Relative to World Average (70%)
- Manufactures 7-66% of Exports
 - Low Relative to World Average (54%)
- Manuf./Total Trade Stable Through Time
- Manuf. Exports Mainly in SITC 6
 - Few Chemicals, Transport Equip., Misc. Manuf.
- Commodity Concentration Has Been Increasing



Reveal Comparative Advantage Index by 1-Digit SITC

<i>Exporter country</i>	<i>SITC</i>									
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
	<i>Food & animals</i>	<i>Beverages & tobacco</i>	<i>Crude materials</i>	<i>Fuels & lubricants</i>	<i>Animal veg. oils</i>	<i>Chemicals</i>	<i>Manufactured goods</i>	<i>Machines & transport</i>	<i>Misc. mfg.</i>	<i>Not classified</i>
Armenia	0.52	9.81	4.21	0.35	0.02	0.03	3.51	0.08	0.88	2.07
Azerbaijan	0.49	0.52	0.80	10.48	2.67	0.23	0.21	0.11	0.03	0.16
Belarus	1.41	0.73	1.16	3.43	0.37	0.97	1.24	0.54	0.73	0.28
Georgia	2.79	17.93	8.11	0.45	0.26	0.61	0.66	0.46	0.10	0.98
Kazakhstan	0.70	0.17	1.89	8.25	0.13	0.22	1.23	0.08	0.02	0.32
Kyrgyzstan	1.61	2.56	3.34	1.44	0.02	0.27	0.74	0.17	0.48	13.55
Republic of Moldova	3.23	33.00	3.65	0.20	9.89	0.09	0.47	0.15	1.77	0.00
Russian Federation	0.21	0.16	1.49	6.39	0.14	0.39	1.12	0.12	0.09	5.72
Tajikistan	0.59	0.96	3.87	1.70	0.00	0.12	3.85	0.19	0.07	1.21
Turkmenistan	0.03	0.01	3.18	10.32	0.24	0.04	0.29	0.02	0.13	0.51
Ukraine	1.37	1.04	2.13	1.33	3.95	0.78	2.87	0.38	0.42	0.37
Unweighted average ...	1.18	6.08	3.08	4.03	1.61	0.34	1.47	0.21	0.43	2.29
Weighted average	0.48	0.52	1.63	5.75	0.71	0.45	1.34	0.17	0.17	4.17



Factor Intensity of CIS Exports

Factor intensity of CIS exports, 2003

	<i>Resource</i>	<i>Unskilled labour</i>	<i>Capital</i>	<i>Skilled labour</i>	<i>Other</i>
Armenia	89.3	0.9	3.1	3.0	3.7
Azerbaijan	93.4	0.5	4.4	1.5	0.1
Belarus	18.2	12.8	22.1	23.4	23.5
Georgia	74.9	1.3	19.1	4.4	0.2
Kazakhstan	86.0	0.3	4.8	8.8	0.1
Kyrgyzstan	65.5	15.5	11.5	6.5	0.9
Republic of Moldova	69.2	20.9	5.3	4.4	0.3
Russian Federation	66.5	1.1	10.0	8.7	13.8
Ukraine	36.0	6.0	19.2	37.6	1.1
Average	66.6	6.6	11.1	10.9	4.9

Source: Derived from data presented in Broadman et al. (2005).

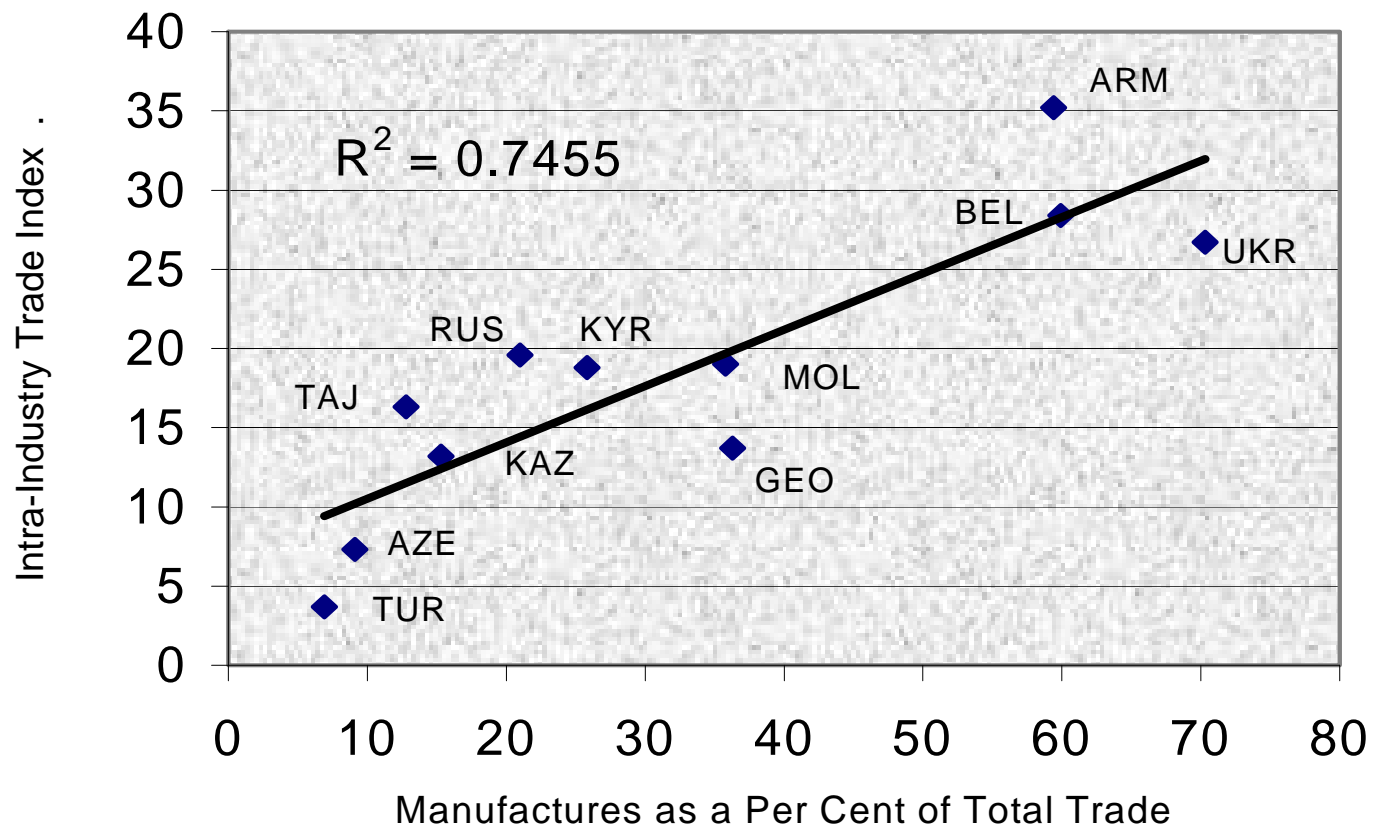


CIS Exports by Factor Intensity

- Significant Differences by Country
- Exports of High-skilled Are Low Even Compared to Developing Countries
- No Real Pattern in CIS vs. Non-CIS
- Time Trend
 - % of High & Medium-skilled Declining
 - % of Low-skilled Increasing
 - Especially to Non-CIS



IIT and Manufacturing





Quality of CIS Exports: Unit Value Calculations Relative to EU-15 Average

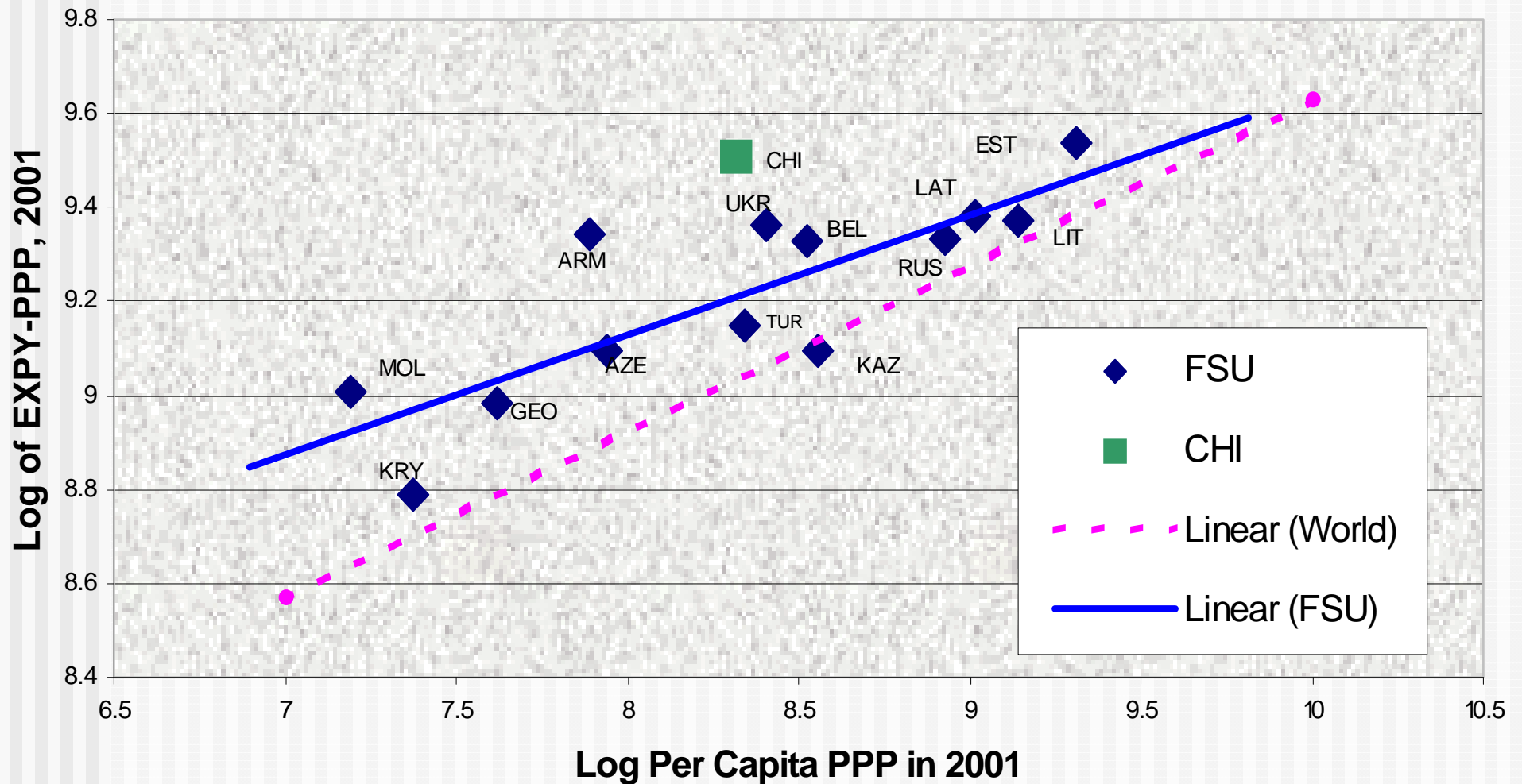
Note: Based upon the 5-digit SITC-Revision 3.

	<i>All goods</i>	<i>Intermediate goods</i>	<i>Capital goods</i>
Armenia	0.80	0.84	0.08
Azerbaijan	1.01	0.46	0.30
Republic of Moldova	0.61	0.64	0.13
Russian Federation	0.72	0.64	0.37
Ukraine	0.70	0.71	0.25
Average	0.77	0.66	0.23
Estonia	0.62	0.65	0.57
Latvia	0.62	0.63	0.27
Lithuania	0.70	0.71	0.19

■ **Source:** UNECE, *Economic Survey of Europe*,
2004 No. 1



Income Level of CIS Exports





Per Capita Income of Countries Producing Similar Exports as the CIS

<i>Exporter country</i>	<i>Per capita income in PPP dollars for 2001</i>	<i>Per capita income of typical economy with similar export structure</i>	<i>Ratio of per capita income of typical economy to this CIS economy</i>
Armenia	2 669.2	9 786.1	366.6
Azerbaijan	2 810.4	4 889.5	174.0
Belarus	5 042.9	9 374.8	185.9
Estonia	11 063.5	16 992.5	153.6
Georgia	2 040.3	3 543.3	173.7
Kazakhstan	5 206.1	4 838.7	92.9
Kyrgyzstan	1 598.7	2 052.3	128.4
Latvia	8 255.8	10 912.0	132.2
Lithuania	9 312.9	10 583.5	113.6
Republic of Moldova	1 331.9	3 792.3	284.7
Russian Federation	7 559.3	9 584.8	126.8
Turkmenistan	4 202.5	5 647.6	134.4
Ukraine	4 466.0	10 383.0	232.5
China	4 089.3	15 703.9	384.0

- **strong & robust predictor of subsequent growth**



Income Level of Manufactured Exports (ExpY) By Region

Exporter Country	Total	CIS	Non-CIS
Armenia	12,422	13,888	12,297
Azerbaijan	14,533	15,564	12,942
Belarus	12,783	13,762	10,812
Georgia	9,764	10,610	8,189
Kazakhstan	11,773	13,738	10,946
Kyrgyzstan	13,324	12,824	15,326
Republic of Moldova	11,355	13,527	10,592
Russian Federation	12,840	14,873	12,290
Turkmenistan	9,366	10,606	8,960
Ukraine	12,494	14,280	11,905
Unweighted Average	12,065	13,367	11,426
Weighted Average	12,717	14,340	12,066



Deleted Products and Export_Y Index

	Number of HS Items Beginning Year	New		Deleted Export Products				
		Number of HS Items	Number of HS Items	Value in \$ Millions, Beginning Year	Per Cent of Manufactures Beginning Year	Per Cent of Total Exports, Beginning Year	PRODY Unweighted Relative to Total	PRODY Weighted Relative to Total
Armenia								
2000 to 2004	765	539	294	13.69	7.86	4.80	1.21	1.07
Azerbaijan								
2001 to 2004	851	320	363	9.61	10.22	0.42	1.07	1.08
Belarus								
2001 to 2004	2,947	272	291	30.64	0.60	0.41	1.22	1.05
Georgia								
2001 to 2004	962	450	394	7.10	6.57	2.22	1.47	1.39
Kyrgyzstan								
2001 to 2004	1,229	401	530	10.40	10.42	2.18	1.04	1.10
Moldova								
2001 to 2004	1,295	505	350	9.37	4.73	1.65	1.39	1.32
Russia								
1996 to 2000	3,570	127	202	620.30	2.68	0.70	0.90	0.66
2000 to 2004	3,495	120	229	988.73	4.17	0.96	0.98	1.07
Ukraine								
1999 to 2002	2,765	334	319	171.74	2.32	1.54	1.14	0.41