Questions In Railway Labor Redundancy

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"Workers eventually benefit from economic reform as states move from central planning to market systems and from protectionism to openness. The change, however, can be wrenching as employment and wages often decline temporarily and as workers have to move from old to new jobs.There remains a need for governments to provide strong support to workers and their families in such times of transition."[1]

[1] James D. Wolfensohn, from World Bank Development Report 1995, "Workers in an Integrating World," The World Bank, Washington, DC 1995, page iii

Questions In Railway Labor Redundancy

- What does “redundant” mean?
  - Financial definition
  - Economic definition
  - Political dimension
- How much redundancy is there?
- Financial and economic benefits of reducing redundancy
- Assisting the transition
- Transition issues
- Results to date

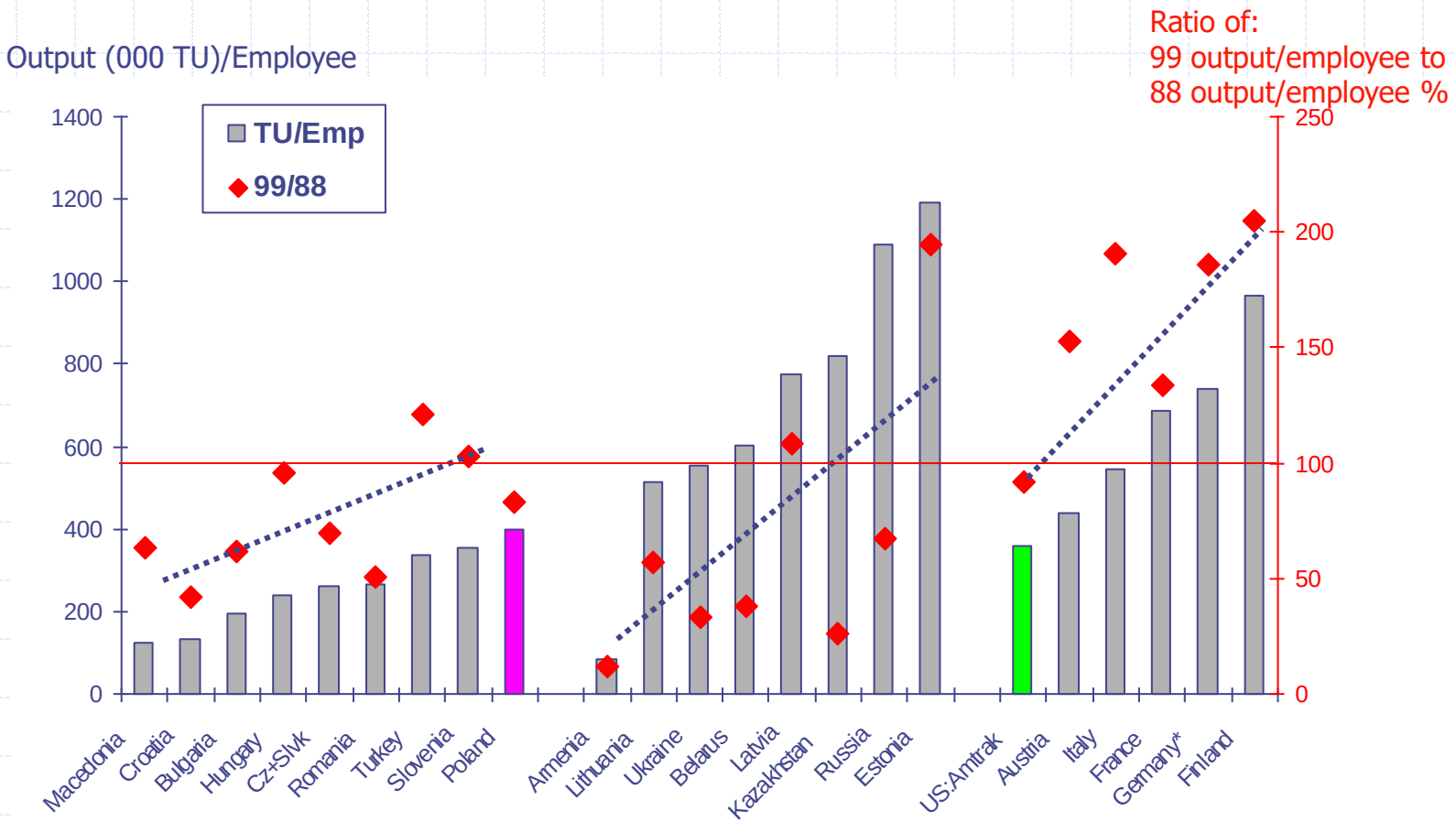
What does “redundant” mean?

- **Financial**: If the value of the worker’s production for the enterprise is less than the cost of wages and benefits, the worker is redundant
- **Economic**: If the value of the worker’s production to the economy is less than the cost to the society, the worker is redundant and should be relocated to where output is greater than cost
- **Political/Social dimension**: transition from railway to other employment has large emotional, economic and financial costs that must be defined, discussed, negotiated and managed

How much redundancy?

- No fixed measure: depends both on productivity and wage levels
- In railways, depends on specific factors such as traffic mix and density and capital assets
- By any measure, considerable redundancy exists

Labor productivity in 1999 and compared with 1988



US and Canada removed

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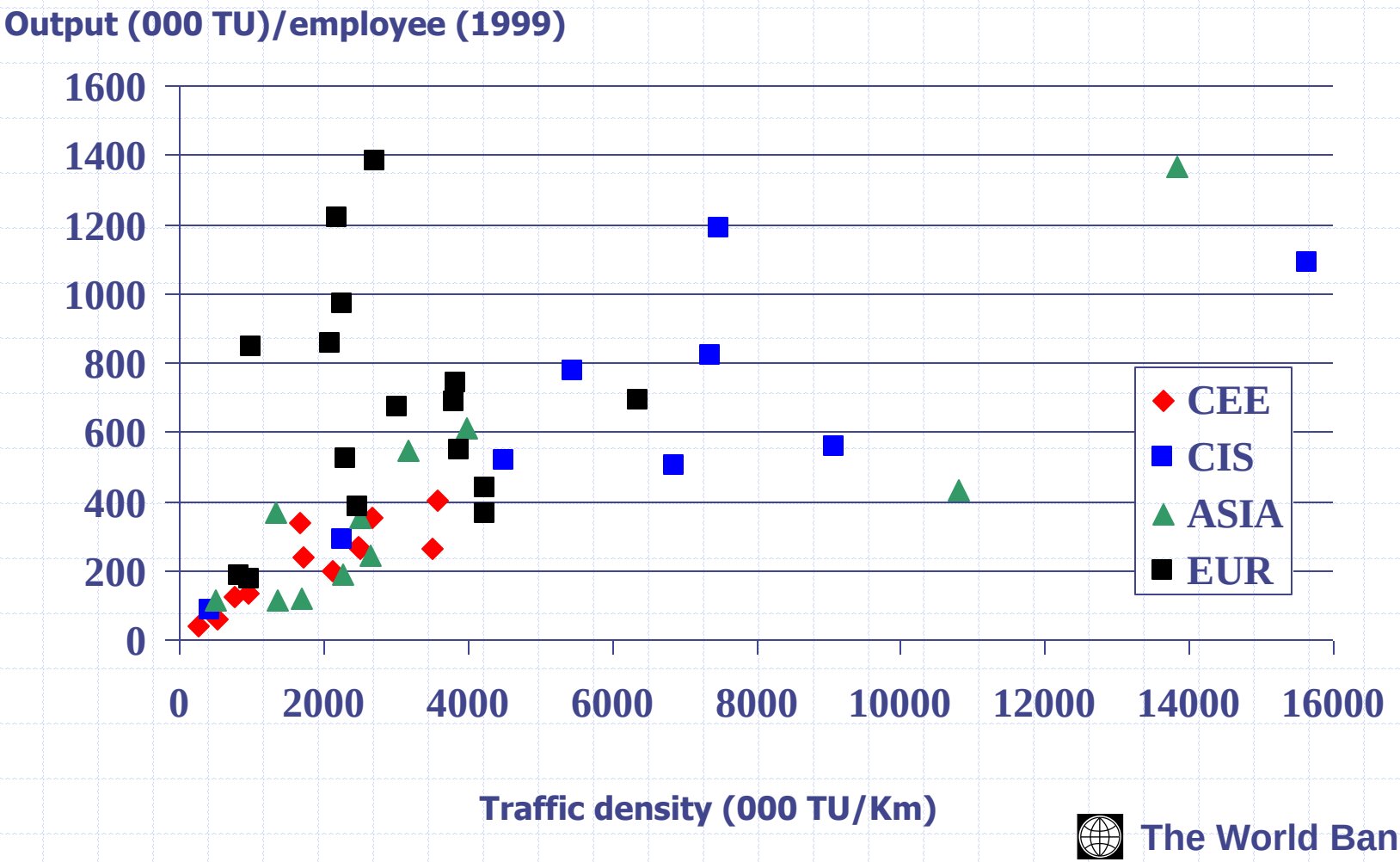
Labor productivity versus traffic density



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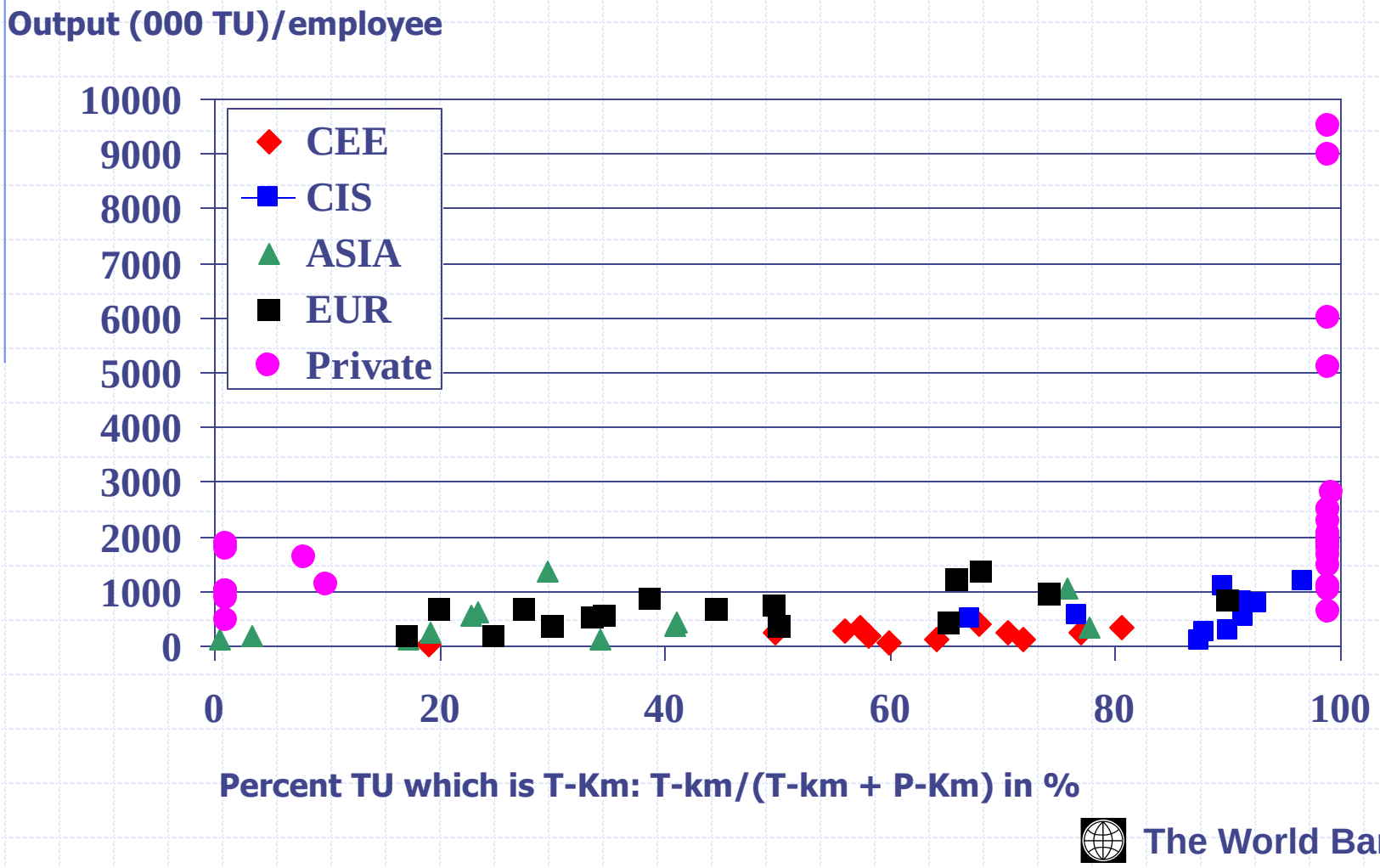
However measured, there is labor redundancy



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Defining the benefits and costs

- **Financial**
  - Benefits: wage and benefits savings (retirement, housing, office space, etc), improved management climate, higher morale and efficiency, higher wages
  - Costs: transition payments, retraining of existing employees, transitional conflict
- **Economic**
  - Benefits: new wages earned (when earned)
  - Costs: Transition program, especially if prior retirement program was under funded
- **Rates of return**: NPV of benefits and costs. Tend to be higher for financial than economic

Assisting the transition

- Early retirement
- Severance benefit, based on final wages and length of service
- Relocation (including housing)
- Retraining before/after, general or specific vocational?
- Good communications
- Help to start new businesses?
- Worker (former and continuing) participation in new enterprises?

Transition issues

- Is private sector involved? If so, who pays labor, and who makes what decisions?
- When to do labor transition: before, during or after restructuring or privatization?
- Assistance to all employees, or only to affected employees
- Predicting the balance of measures actually chosen by employees

Results to date

- Three examples: Argentina, Brazil and Mexico
- Other recent experiences: Poland and Estonia, Cote d'Ivoire/Burkina Faso, Bolivia, Peru, Croatia
- How many employees affected
- Impact on productivity and costs

Example labor programs

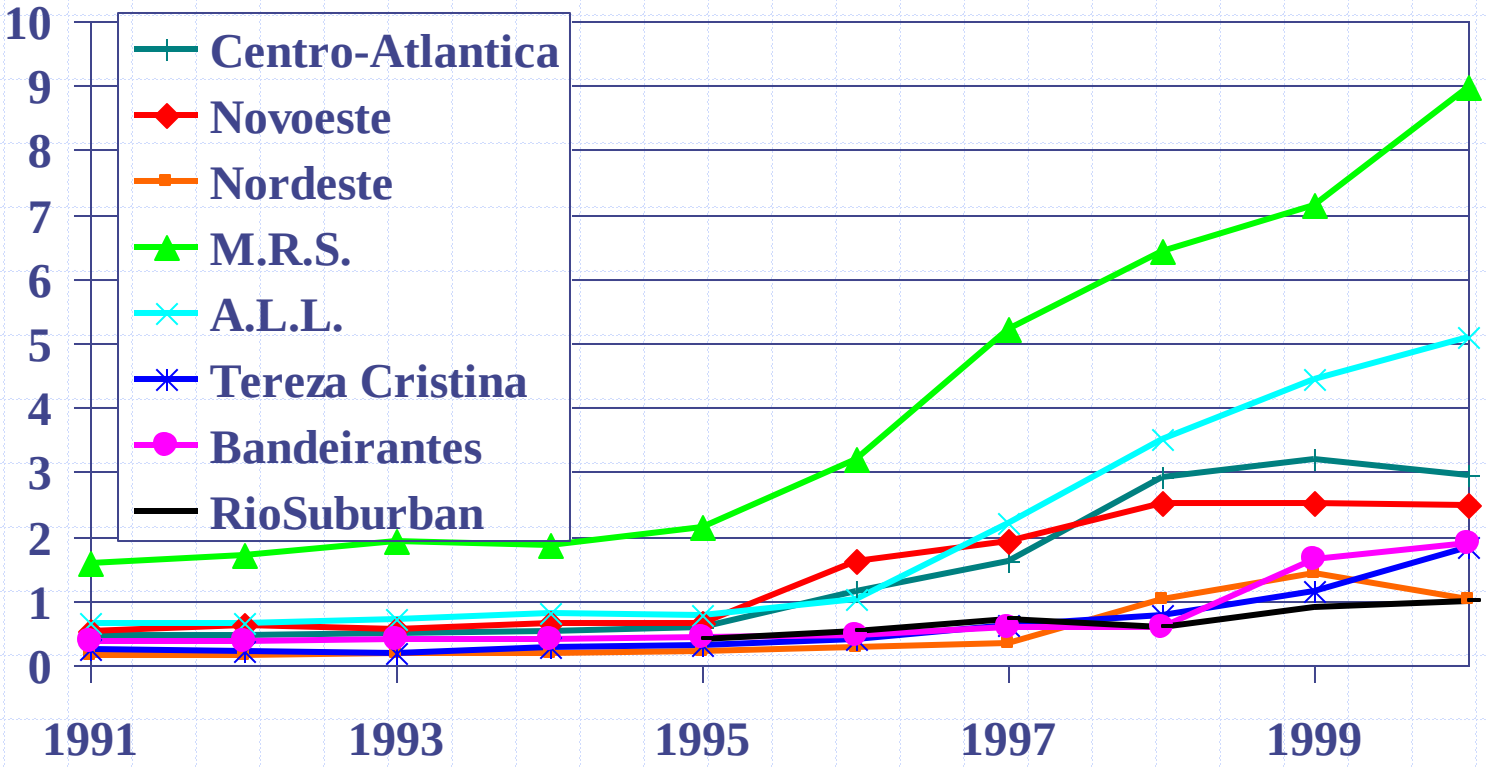
	Employment Before/After	Early Retirement	Severance Benefits	Relocation Assistance	Retraining	Worker Participation in New Company
Argentina	82,000/12,900	50/55	1 month salary per year of service	No	No	Yes (3%)
Brazil	54,000/14,300	25/20 years service	1 to 2 months salary per year of service	Yes	Yes -- rail-specific and little used	No
Mexico	46,800/16,000	None- but sale value funded pensions	Single payment for value of Government employment rights	No	No	No
Poland	205,000/165,000	50/55	PZl 20,000/30,000, defined by unemployment rate in area of employment	No	Yes -- little used	No
Estonia	4,481/2,464	Up to 2 years with 50 % wages	Standard in law: 2-4 months bonus, plus notice payments plus 6 months unemployment	No	Yes -- centrally provided	No

Labor Force Changes in Concessioned Railways

	Labor Force in Year Before Concessioning	Labor Force in Most Recent Year	Percent Reduction
Freight Concessions			
Argentina	67,000	5,300	92.1
Brazil	49,896	12,251	75.4
Bolivia	3,900	785	79.9
Mexico	46,823	16,000	65.8
Cote d'Ivoire/Burkina Faso	1,811	1,673	7.6
Passenger Concessions			
Buenos Aires Suburban	15,000	7,600	49.3
Buenos Aires Subté	4,750	2,100	55.8
Rio Suburban	4,170	2,236	46.4
Rio Metro	3,272	1,534	53.1

Brazil rail labor productivity

(000,000 TU/Employee)



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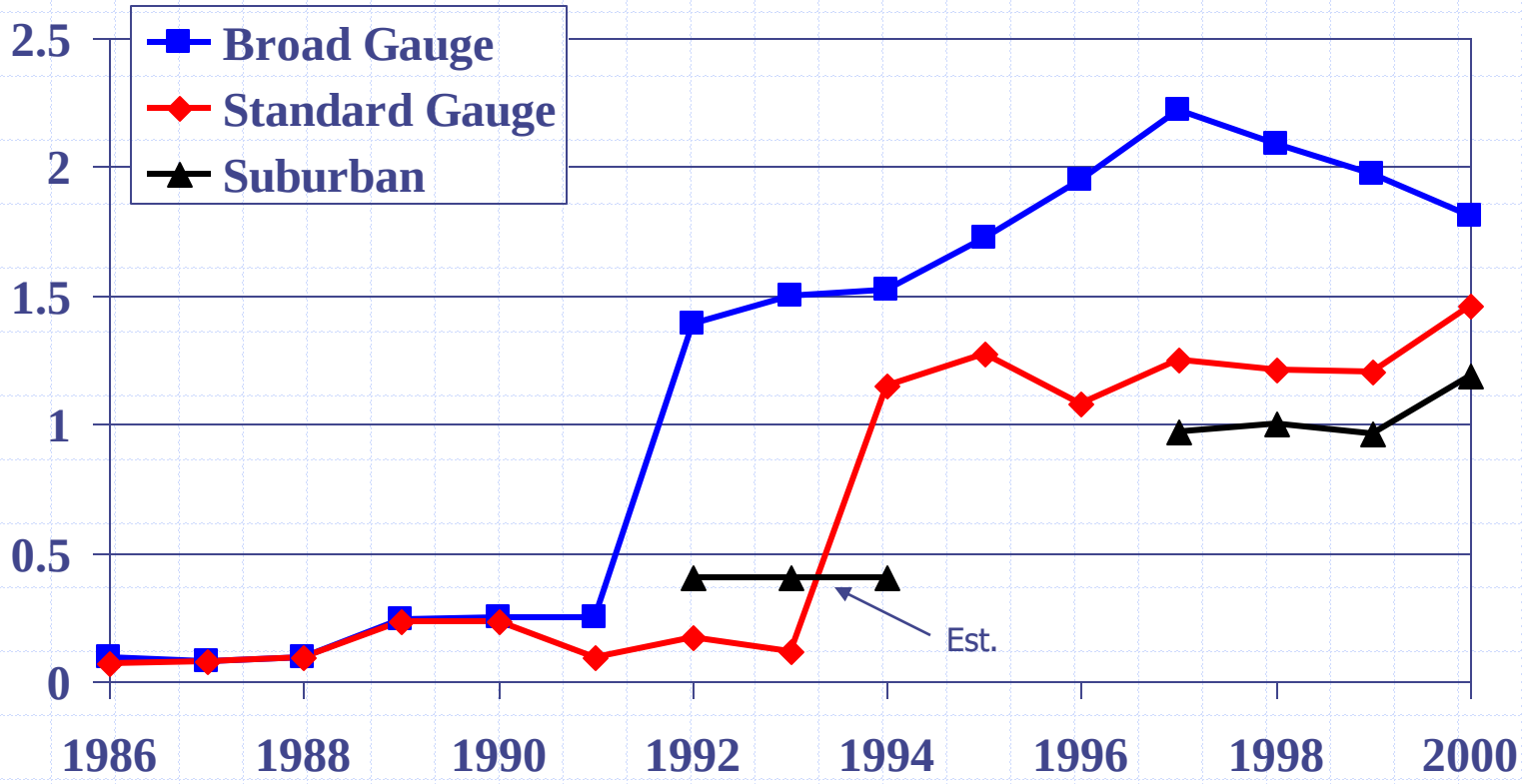
Argentina rail labor productivity

(000,000 TU/Employee)



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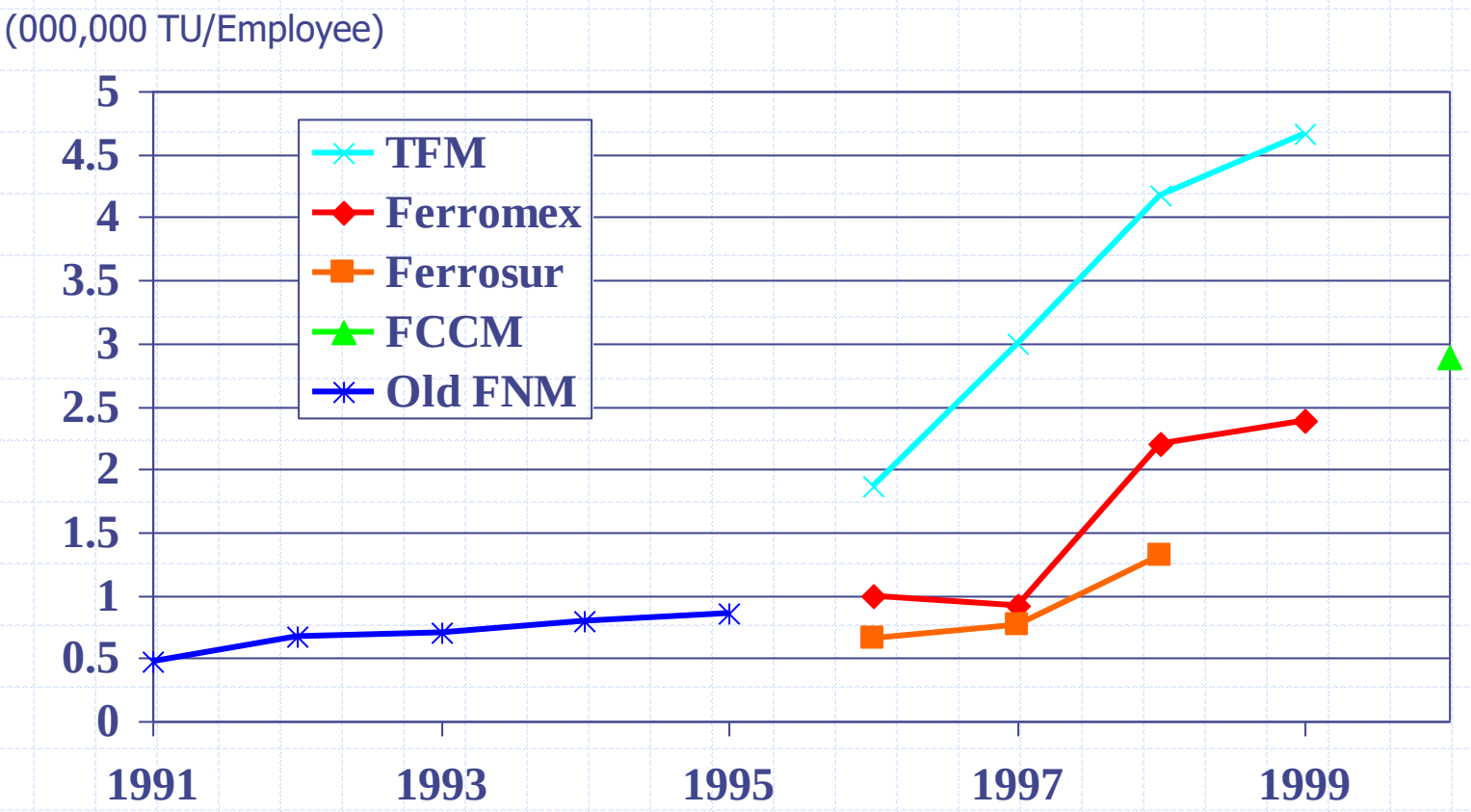
Freight rail labor productivity in Mexico



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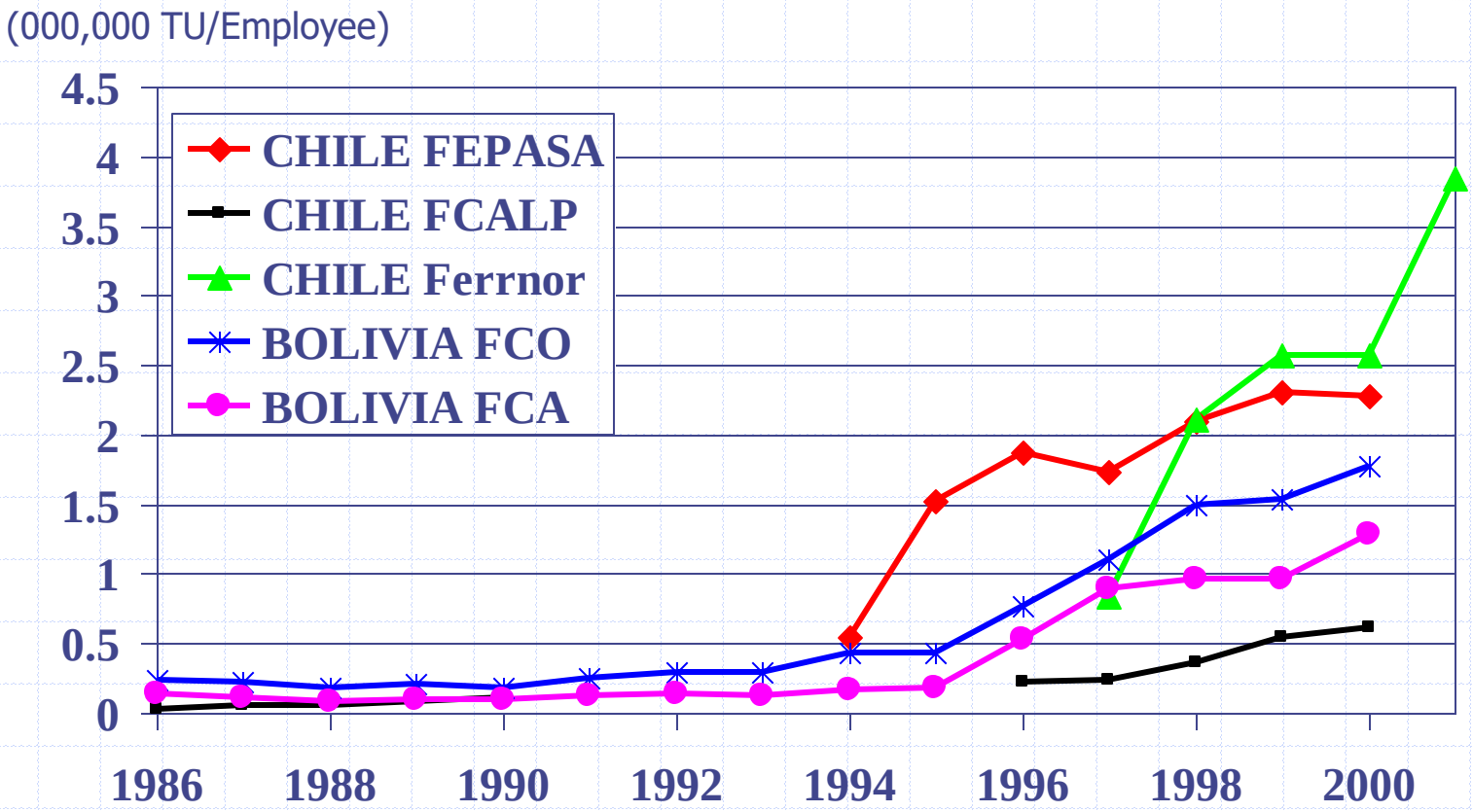
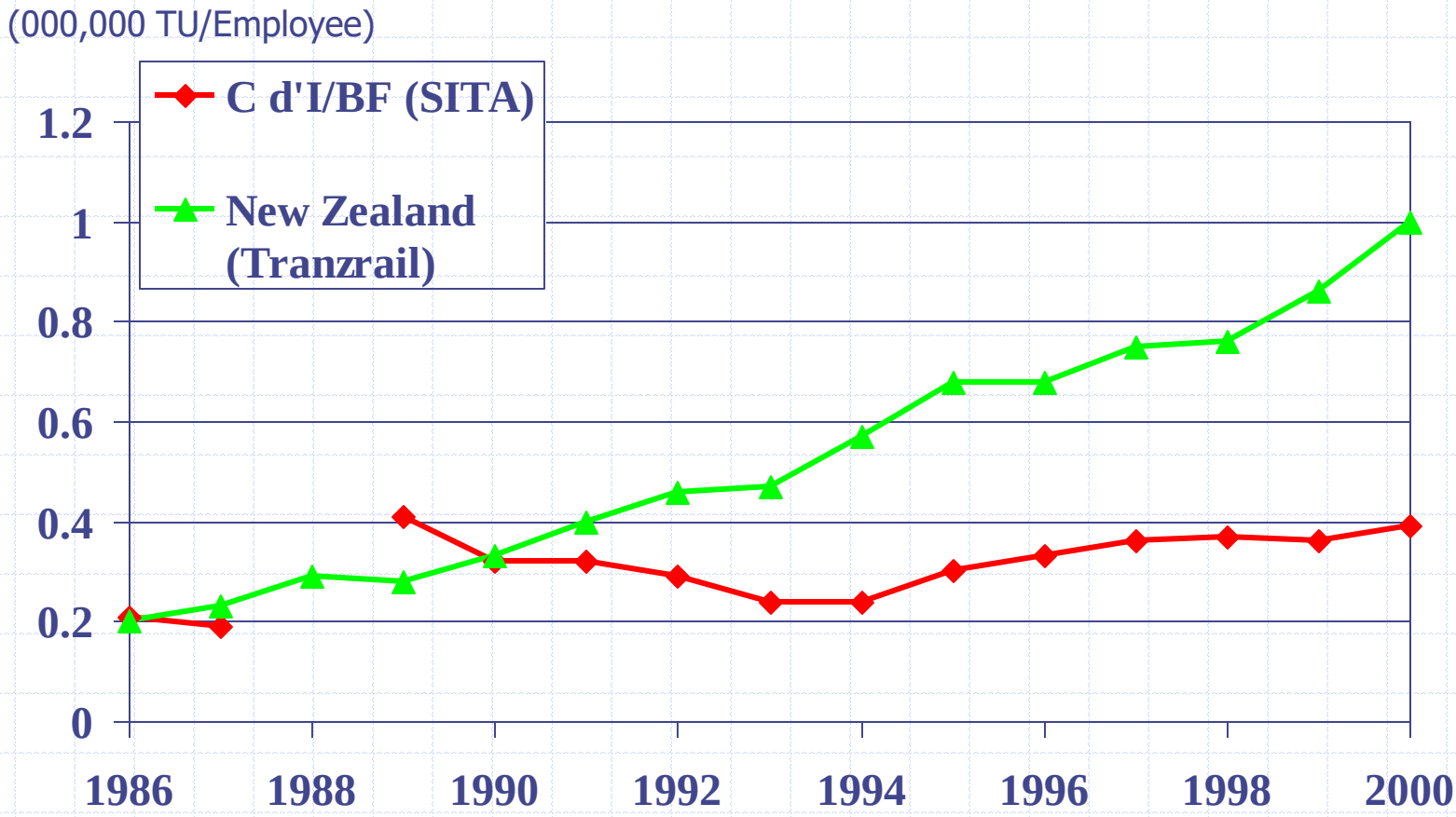
Freight rail labor productivity in Chile and Bolivia



Rail labor productivity in Cote d'Ivoire/Burkina Faso and New Zealand



Freight tariff savings after concessioning

	Initial Year	Tariff in initial year (PPP$/Ton-Km)	Tariff in ending year (PPP$/Ton-Km)	Ton-km in ending year	Total savings (million of PPP $)	% tariff reduction
Cote d'Ivoire	95	0.123	0.106	523	8.9	13.8
Argentina Broad Gauge	93	0.039	0.036	6,898	20.7	7.7
Argentina Standard Gauge	94	0.032	0.043	495	(5.4)	-34.4
Bolivia FCO	96	0.147	0.123	626	15.0	16.3
Bolivia FCA	96	0.061	0.098	557	(20.6)	-60.7
Brazil:						
FCA	96	0.051	0.032	7,268	138.1	37.3
Novoeste	96	0.043	0.027	1,588	25.4	37.2
Nordeste	96	0.056	0.026	709	21.3	53.6
MRS	96	0.027	0.022	26,837	134.2	18.5
ALL	96	0.044	0.033	10,285	113.1	25.0
Tereza Cristina	96	0.120	0.101	259	4.9	15.8
Bandeirantes	98	0.038	0.023	5,984	89.8	39.5
Chile Fepasa	94	0.089	0.053	1,189	42.8	40.4
Chile Ferronor	96	0.072	0.046	743	19.3	36.1
Mexico -- TFM	97	0.054	0.043	17,256	189.8	20.4
Mexico -- Ferromex	97	0.041	0.036	20,638	103.2	12.2
New Zealand	92	0.104	0.081	4,078	93.8	22.1
Total					**994.2**	

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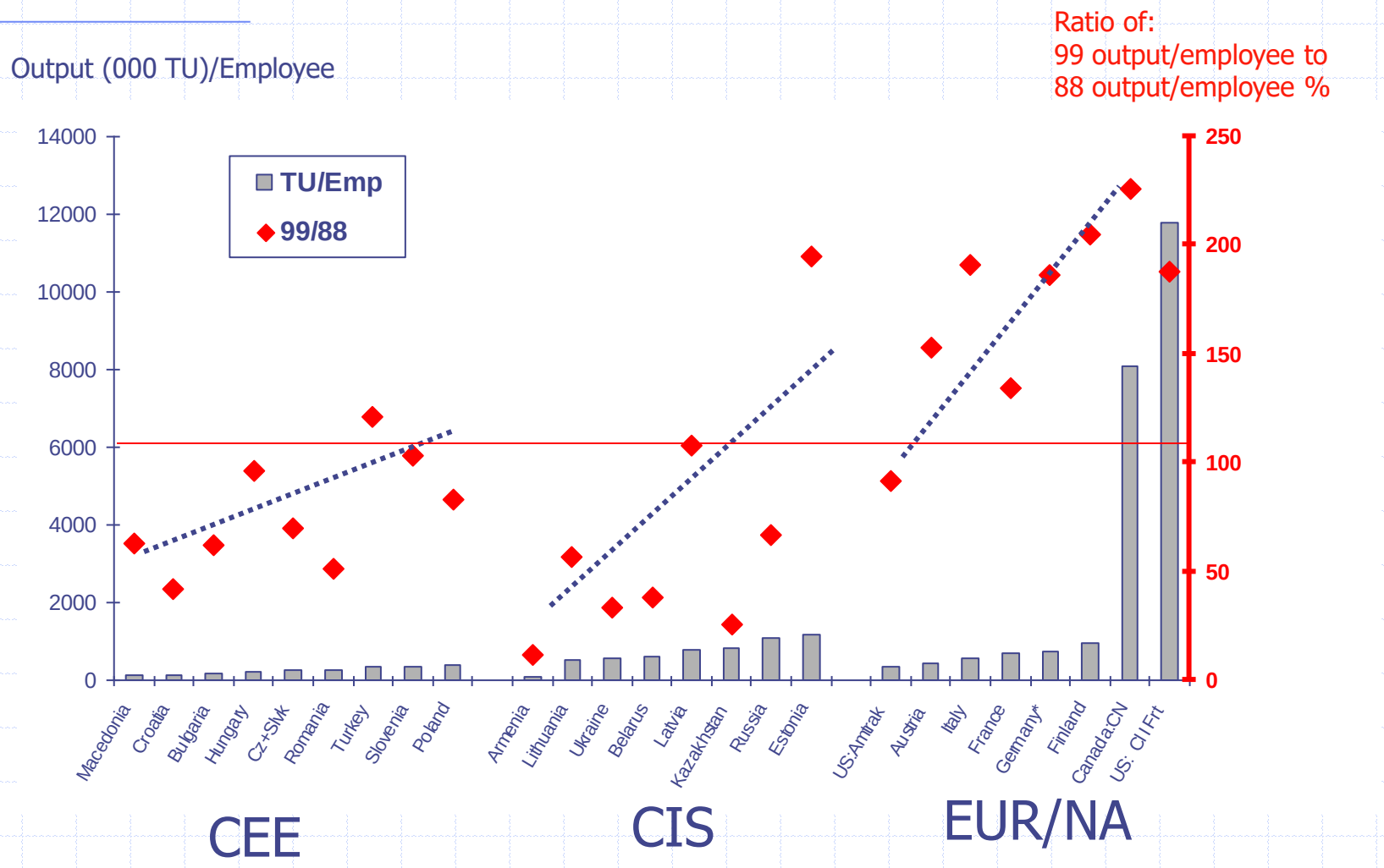
Labor productivity 1999 and compared with 1988



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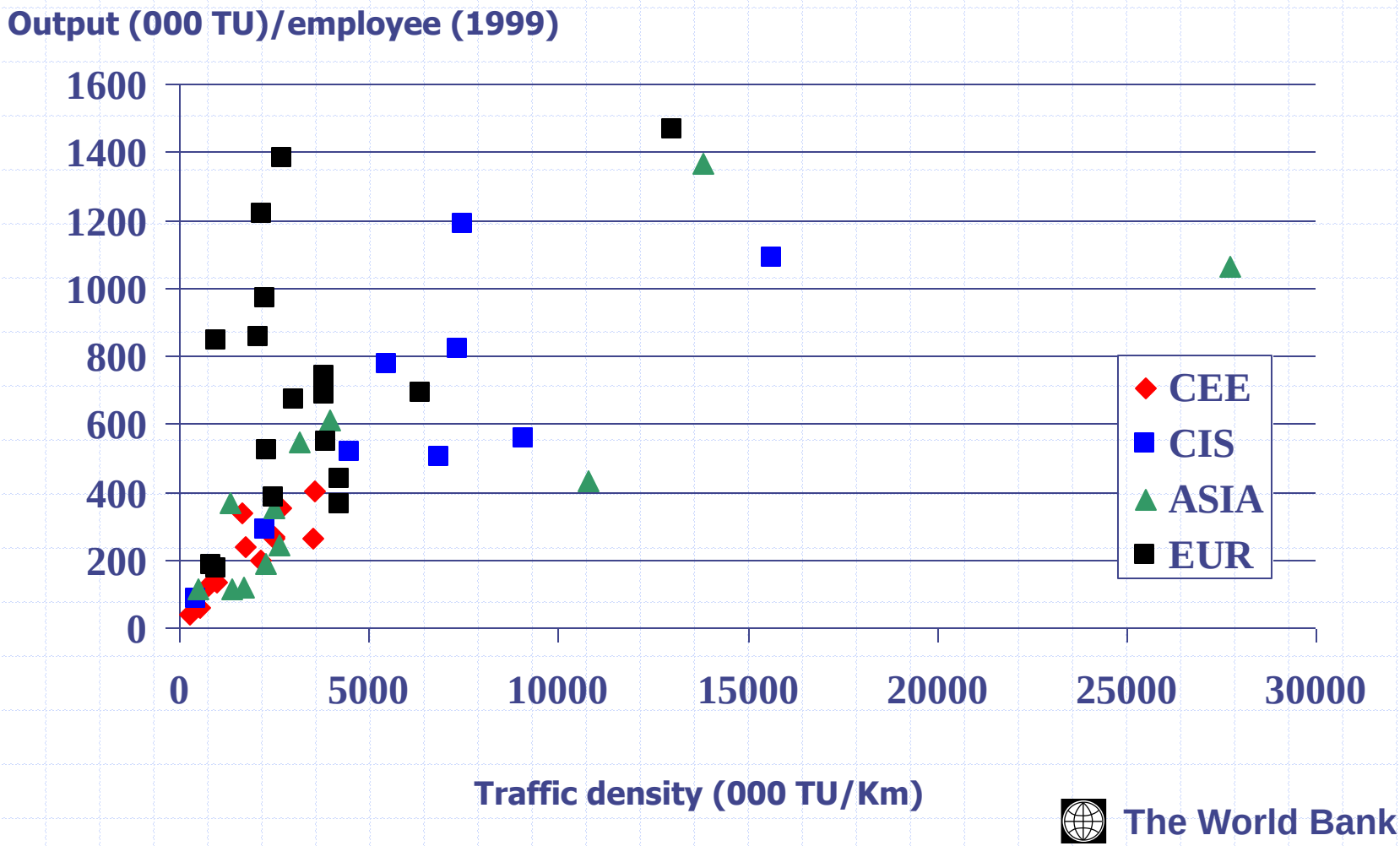
Labor productivity versus traffic density



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