

Especialização Comercial e Intensidade de Emissões Industriais: Situação e Implicações Regionais

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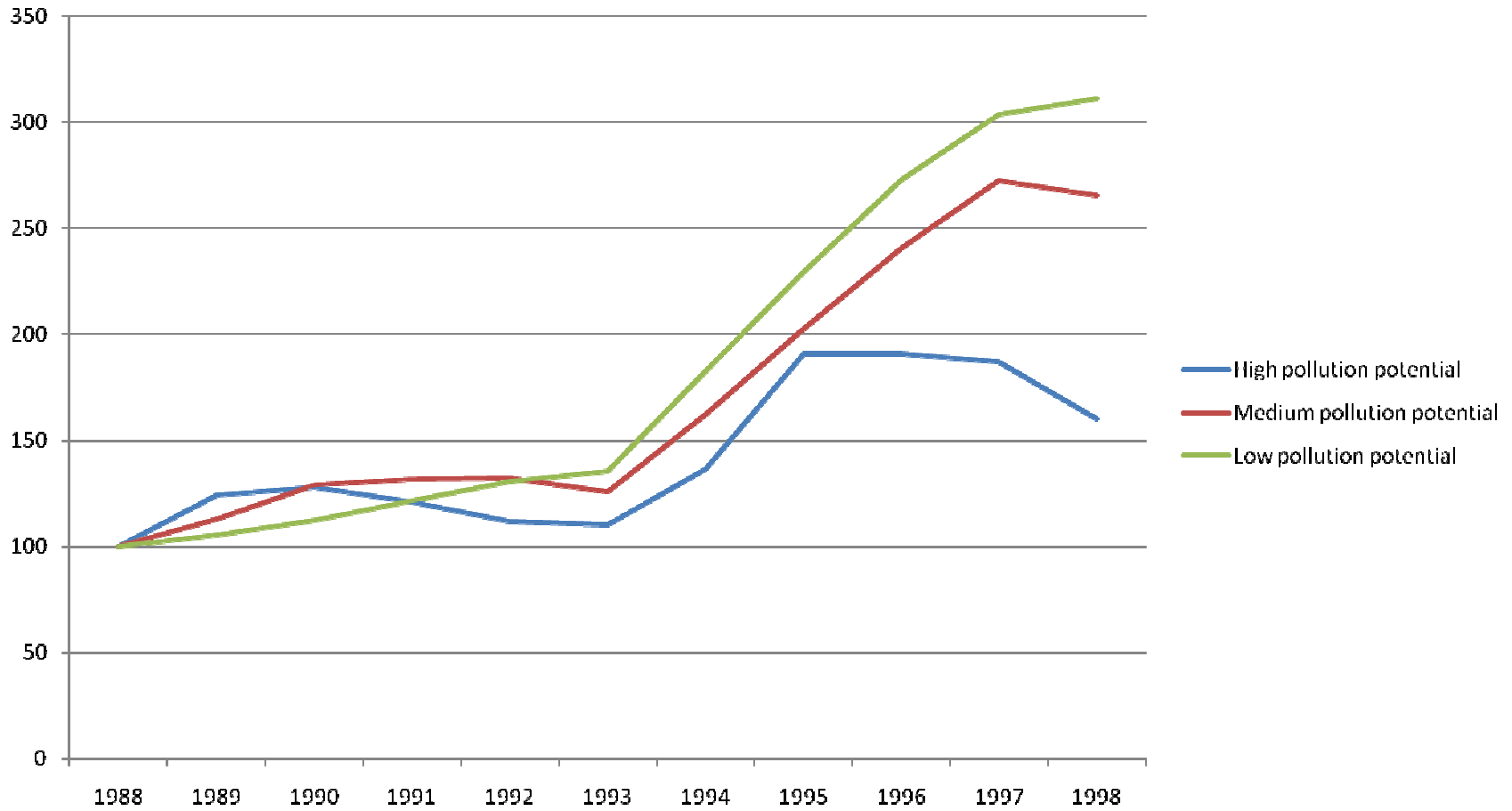
Seminário “Mudança Climática, Comércio e
Cooperação na América Latina”

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General trends

- In the first half of the period (1988-1997), there was a relative reduction of the dependence on natural resource based commodities, and the most dynamic industrial exports were based on products with less contamination potential.

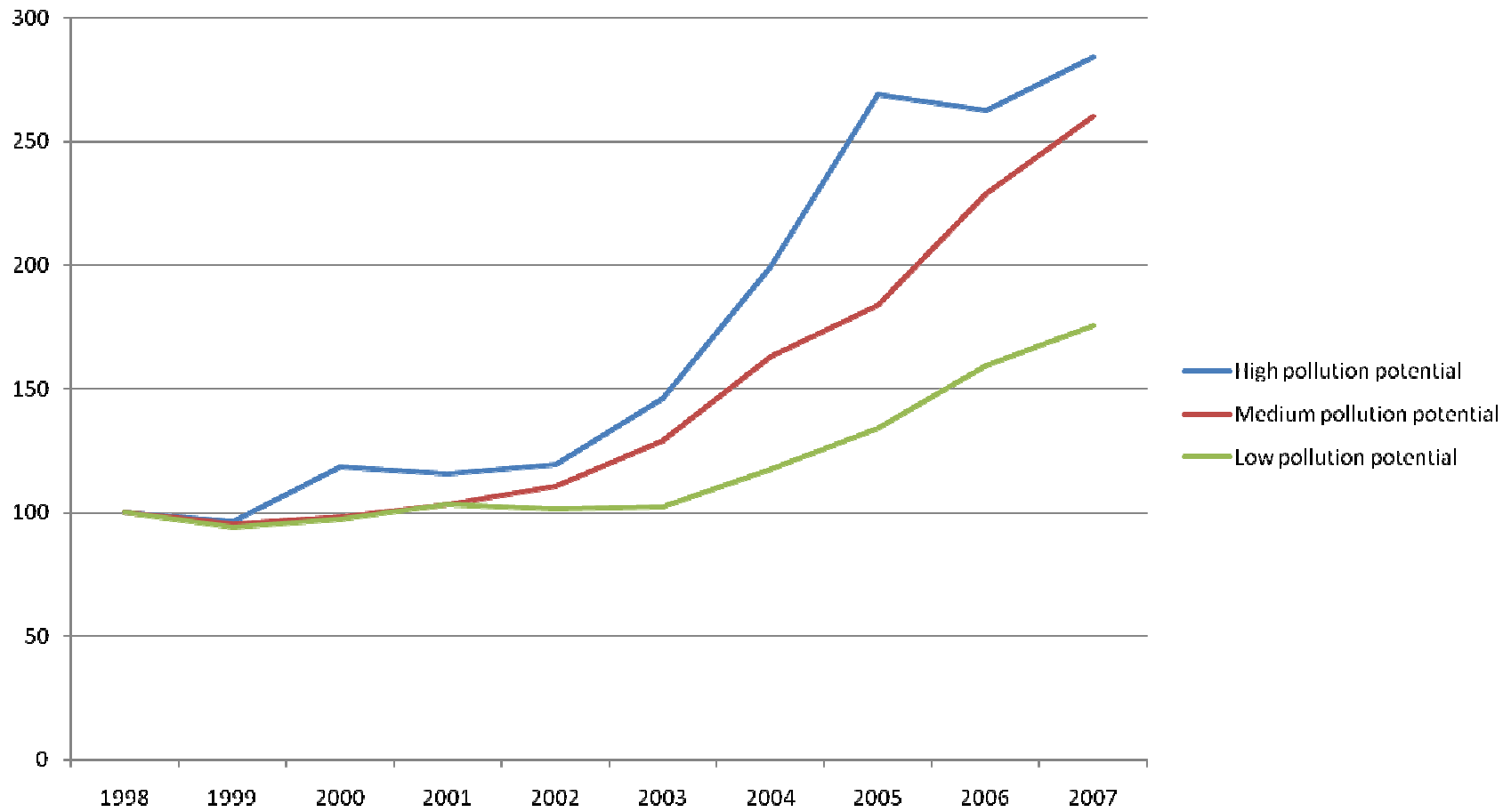
Evolution of exports according to potential pollution groups, 1988/1997 (1988=100)



General trends

- However, in recent years (1998-2007), there is a clear reversal of that trend, with Latin American becoming more dependent on natural resource based commodities and industrial products with higher contamination potential.

Evolution of exports according to potential pollution groups, 1998/2007(1998=100)



Hypothesis 1

- Higher commodity prices due to the world economy boom has guaranteed the expansion of sectors based on absolute comparative advantages, especially cheap natural resources or less restrictive/effective pollution control;

Hypothesis 2

- The lack of planning in the economic openness process has restrained local activities with high innovation potential and lower contamination potential that were not inefficient but have less absolute advantage comparatives, and thus could not afford the competition of foreign producers, especially when the later benefit from very cheap labor, governmental protection (for example, assuring low cost credit), large scale and other kind of advantages ;

Hypothesis 3

- The problem was aggravated by the overvaluation of the exchange rate in many Latin American economies (“Dutch disease”), because of the increasing supply of foreign currency guaranteed by the expansion of sectors based on absolute comparative advantages that could afford losses in exchange rates due to the rise in commodities international prices;

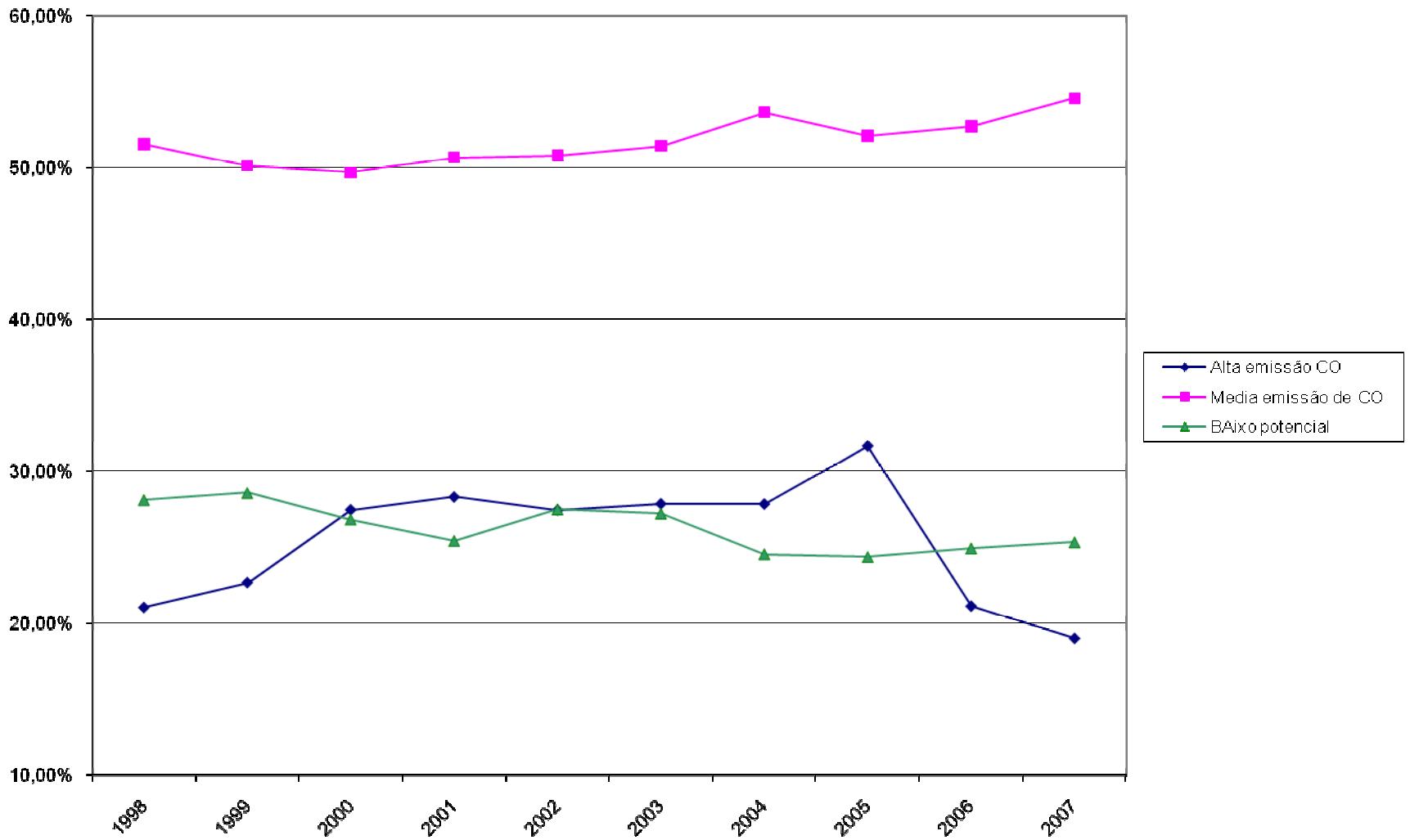
Hypothesis 4

- Public policy failures, since Latin American governments still not recognize the problems that economic growth based on resource depletion and environmental degradation brings to society; indeed, many public policies have strongly supported the expansion of commodities based on unsustainable natural resource use and industrial products with high contamination potential because they are looking at maximizing short term revenues.

Argentina: sectors with high contamination potential

ARGENTINA	1998	1999	2001	2003	2005	2007
061 Sugar and honey;	4.04%	2.79%	3.21%	2.58%	2.54%	3.65%
334 Petroleum products, refined;	13.39%	15.64%	22.18%	27.38%	29.14%	0.31%
511 Hydrocarbons, n.e.s. and their derivatives;	2.26%	2.50%	2.60%	3.62%	3.82%	4.92%
583 Polymerization and copolymerization products;	6.89%	7.63%	10.02%	9.35%	9.05%	12.24%
591 Disinfectants, insecticides, fungicides, etc.;	3.18%	3.34%	3.25%	3.61%	3.03%	4.19%
598 Miscellaneous chemical products, n.e.s.;	2.61%	2.73%	2.14%	1.49%	1.62%	3.24%
641 Paper and paperboard;	2.46%	2.47%	2.37%	3.32%	2.91%	3.53%
642 Paper and paperboard, cut to size or shape, articles of;	3.38%	3.42%	2.90%	2.65%	2.13%	3.46%
674 Universals, plates and sheets, of iron or steel;	4.20%	4.07%	4.11%	4.62%	4.45%	4.00%
678 Tubes, pipes and fittings, of iron or steel;	6.94%	5.73%	5.44%	5.89%	6.50%	12.49%
713 Internal combustion piston engines and parts;	8.68%	6.99%	3.76%	2.81%	3.22%	4.90%
	58.02%	57.33%	61.98%	67.32%	68.42%	56.94%

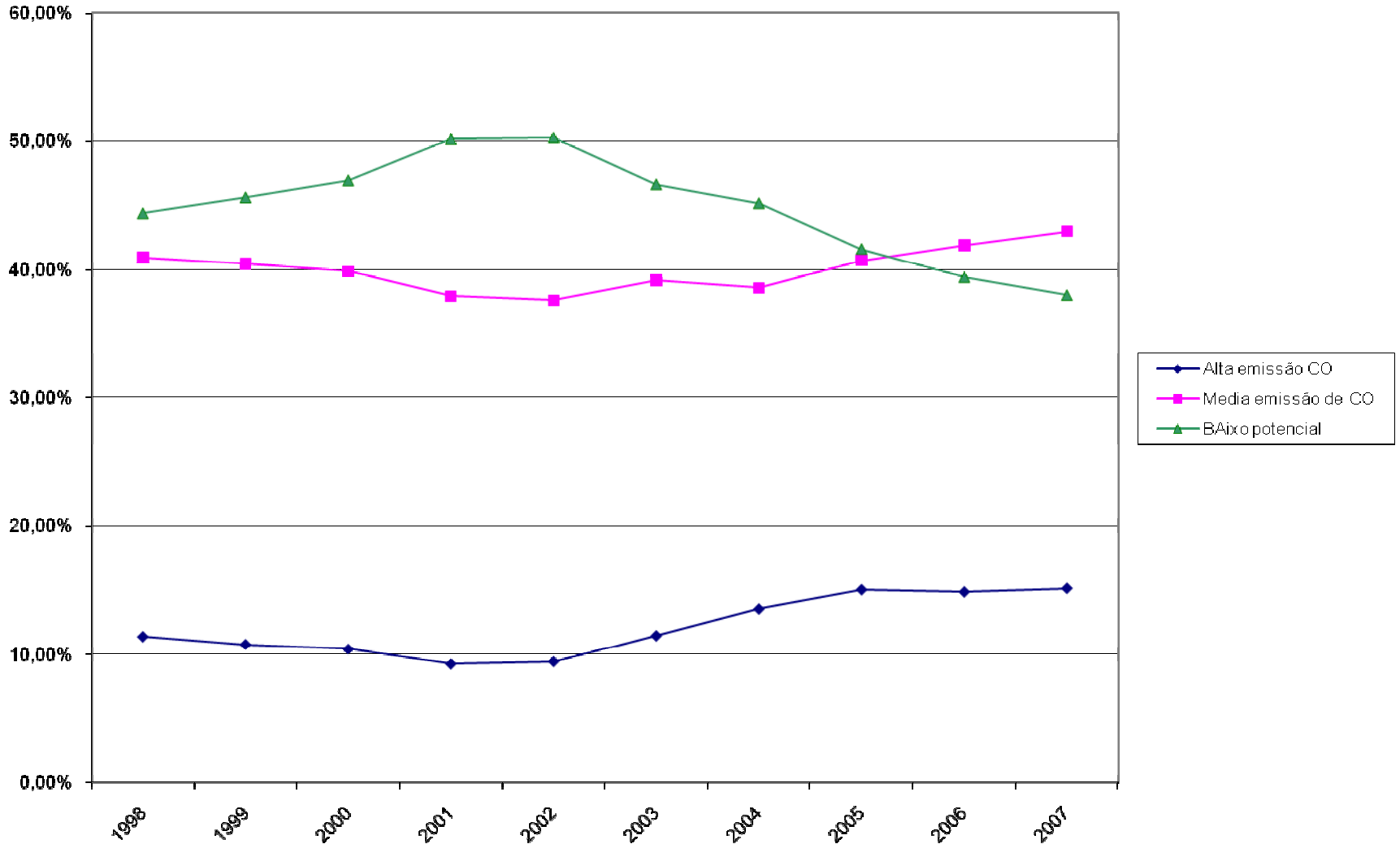
Argentina



Mexico: sectors with high contamination potential

MEXICO	1998	1999	2001	2002	2003	2005	2007
583 Polymerization and copolymerization products;	3.71%	4.05%	4.49%	4.29%	3.98%	3.83%	4.21%
642 Paper and paperboard, cut to size or shape, articles of;	3.19%	3.53%	3.73%	3.76%	3.98%	3.09%	3.26%
672 Ingots and other primary forms of iron or steel;	2.97%	2.41%	1.97%	1.93%	3.11%	6.17%	5.82%
678 Tubes, pipes and fittings, of iron or steel;	2.29%	1.75%	1.77%	1.91%	1.98%	2.64%	3.18%
713 Internal combustion piston engines and parts;	21.87%	21.76%	19.62%	19.50%	18.48%	18.09%	17.43%
716 Rotating electric plant and parts thereof, n.e.s.;	12.11%	12.72%	12.26%	12.53%	10.89%	9.04%	9.34%
741 Heating and cooling equipment and parts;	7.65%	8.23%	8.56%	8.68%	8.23%	6.84%	8.20%
743 Pumps (excl. pumps for liquids), compressors, fans;	6.08%	6.91%	8.08%	8.24%	7.89%	7.26%	8.27%
744 Mechanical handling equipment, and parts;	3.97%	4.37%	4.38%	4.35%	4.14%	2.81%	3.43%
	63.83%	65.73%	64.86%	65.21%	62.69%	59.77%	63.14%

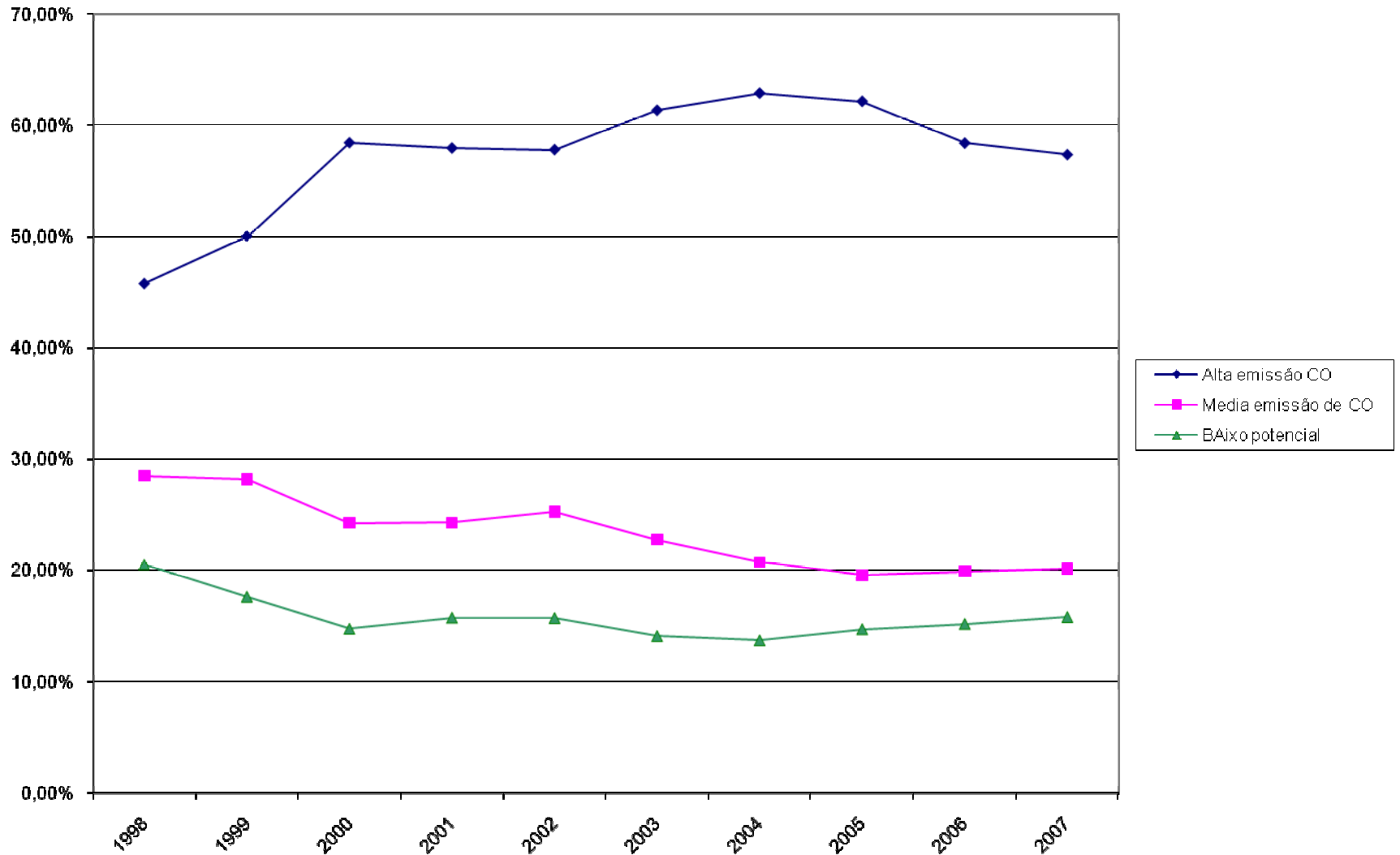
Mexico



Chile: sectors with high contamination potential

CHILE	1998	1999	2001	2002	2003	2005	2007
248 Wood, simply worked and railway sleepers;	8.35%	11.03%	13.15%	17.01%	20.45%	20.26%	13.94%
251 Pulp and waste paper;	33.03%	34.11%	28.96%	24.49%	23.64%	19.11%	25.13%
512 Alcohols, phenols, phenol-alcohols and their derivatives;	7.75%	6.77%	8.01%	7.88%	7.27%	9.36%	10.84%
522 Inorganic chemical elements, oxides and halogen salts;	6.32%	4.77%	4.14%	4.02%	3.73%	5.13%	6.49%
641 Paper and paperboard;	10.26%	10.84%	11.17%	10.99%	11.01%	9.15%	8.16%
671 Pig iron, spiegeleisen, sponge iron, ferro-alloys;	0.65%	0.34%	0.24%	0.37%	0.75%	4.19%	6.44%
	66.36%	67.85%	65.67%	64.76%	66.86%	67.19%	71.00%

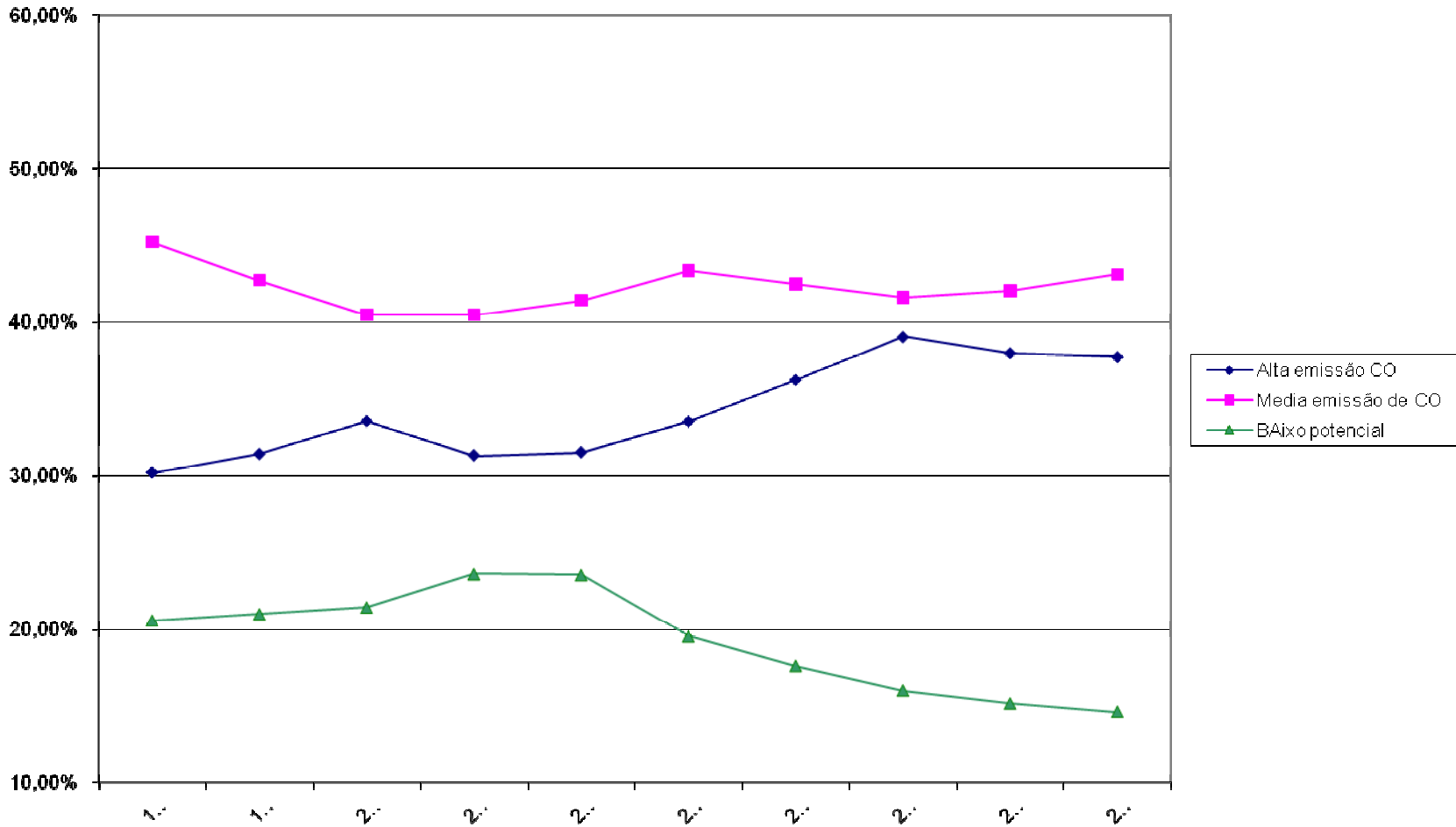
Chile



Brazil: sectors with high contamination potential

BRASIL	1998	1999	2001	2003	2005	2007
248 Wood, simply worked and railway sleepers;	2.27%	3.70%	5.00%	7.20%	6.04%	4.29%
251 Pulp and waste paper;	11.38%	14.16%	13.46%	10.89%	8.63%	10.51%
512 Alcohols, phenols, phenol-alcohols and their derivatives;	1.06%	0.99%	1.11%	1.55%	3.05%	4.42%
583 Polymerization and copolymerization products;	4.28%	4.59%	4.33%	3.71%	3.73%	4.60%
641 Paper and paperboard;	7.88%	8.01%	6.83%	5.90%	4.09%	4.08%
671 Pig iron, spiegeleisen, sponge iron, ferro-alloys;	4.66%	4.03%	3.89%	4.79%	7.52%	8.74%
672 Ingots and other primary forms of iron or steel;	8.42%	6.79%	6.02%	7.66%	9.46%	8.57%
674 Universals, plates and sheets, of iron or steel;	3.86%	2.99%	2.45%	3.82%	5.49%	6.08%
713 Internal combustion piston engines and parts;	9.86%	9.24%	8.64%	8.19%	7.70%	7.61%
743 Pumps (excl. pumps for liquids), compressors, fans;	4.71%	4.91%	4.68%	3.61%	2.73%	2.87%
Subtotal	58.39%	59.42%	56.41%	57.34%	58.45%	61.78%

Brazil



Other national issues: Brazil

- Main problem: deforestation and cattle ranching (75% of total emissions)
- Biofuels: problem or solution?
- Deindustrialization and the confirmation of the pollution haven hypothesis.