



# **NAFTA and THE STATE AND HIGHER EDUCATION AND RESEARCH**

## **THE HIDDEN HAND REVEALED**

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### **Global higher education narratives**

- Prior to 1980 (approximately) the dominant narrative about higher education was access, equality, potential
- After 1980, the access narrative loses power, and the competitiveness narrative gains strength. Higher education is not about equality and the general public good, but about economic competitiveness through research and national dominance of the global economy through discovery and invention, along with individual advancement through education. The state and the public realm is devalued while the private, for-profit and individual is valued.

## BUDGETS AS POLICY DOCUMENTS

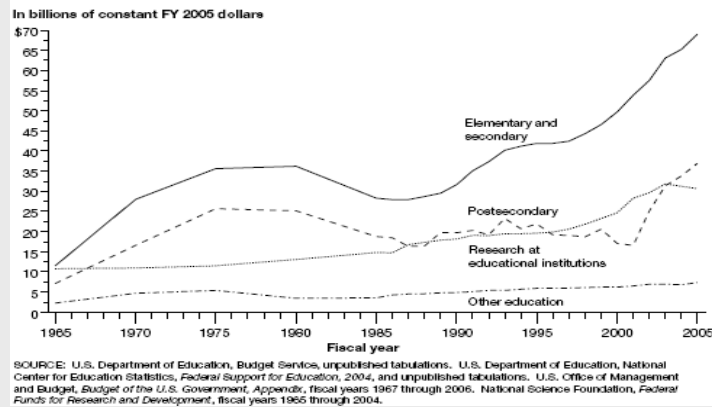
- Federal, state and institutional budgets are powerful public policy documents
  - 1980 to present
    - the access narrative, which is about inclusiveness and increased opportunity for postsecondary education, lost strength
  
    - the competitiveness narrative, which is about research markets, gained strength  
subtext: stratification

## Who benefits, who pays: USA

- Individual level:
  - Benefits to top twenty percent
- Institutional level:
  - Benefits to top hundred research institutions
- International level: NAFTA
  - Benefits to wealthy countries
    - 1. USA
    - 2. Canada

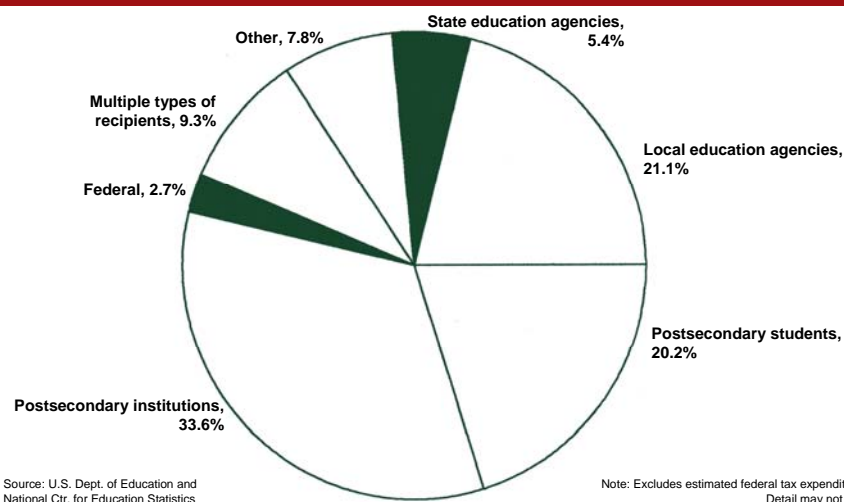
## Federal on-budget funds for education 1965-2005

Figure 18. Federal on-budget funds for education, by level or other educational purpose: Selected years, 1965 through 2005



## The University of Georgia Institute of Higher Education

### Estimated percentage of federal support for education, by type of ultimate recipient: Fiscal year 2003



## Stratification

- **Unlike federal student financial aid, which is spread over many institutions**
  - Research funding is concentrated on a relatively small number of institutions
  
- **The top 100 institutions in terms of total R&D expenditures accounted for 80 percent of all R&D dollars in FY 2003.**
  - The 20 research performers with the highest federally financed R&D expenditures represented 32 percent of federally sponsored expenditures. The 20 leading research performers in terms of total R&D expenditures accounted for 31 percent of total academic R&D spending.

**Twenty institutions reporting the largest FY 2003 academic R&D expenditures in the sciences and engineering: FY 2002-03 (Millions of current dollars)**

Institution and 2003 rank	Total		Federal	
	2002	2003	2002	2003
All R&D expenditures <sup>a</sup>	36,370	40,077	21,860	24,734
Leading 20 institutions	11,125	12,284	6,968	7,828
1 Johns Hopkins U., The <sup>b</sup>	1,140	1,244	1,023	1,107
2 U. CA, Los Angeles	788	849	367	421
3 U. Ill all campuses	674	780	444	517
4 U. Ill Madison	662	721	345	396
5 U. IllA	627	685	487	566
6 U. CA, San Francisco	597	671	327	372
7 U. CA, San Diego	585	647	359	400
8 Stanford U.	538	603	427	484
9 U. PA	522	565	398	416
10 Cornell U. all campuses	496	555	271	321
11 PA State U. all	493	533	285	301
12 Duke U.	442	520	261	307
13 U. MN all campuses	494	509	295	293
14 U. CA, Berkeley	475	507	217	238
15 OH State U. all	432	496	178	198
16 U. IL Urbana-Champaign	427	494	214	266
17 MA Institute of	447	486	330	356
18 U. CA, Davis	457	482	177	208
19 Washington U. St. Louis	417	474	303	357
20 Baylor C. of Medicine	412	462	259	303
All other institutions	25,245	27,794	14,892	16,906

<sup>a</sup> Data do not include R&D performed by university-administered federally funded research and development centers.

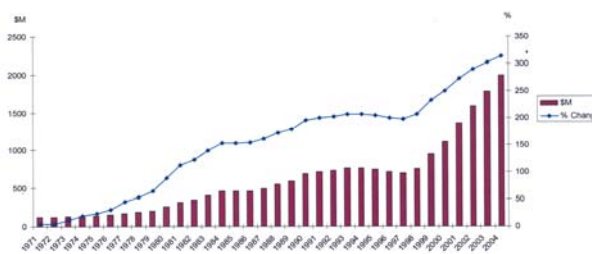
<sup>b</sup> Includes R&D expenditures for Applied Physics Laboratory (APL). For FY 2003, APL reported \$607 million in total and \$582 million in federally financed R&D expenditures.

NOTE: Because of rounding, detail may not add to total.

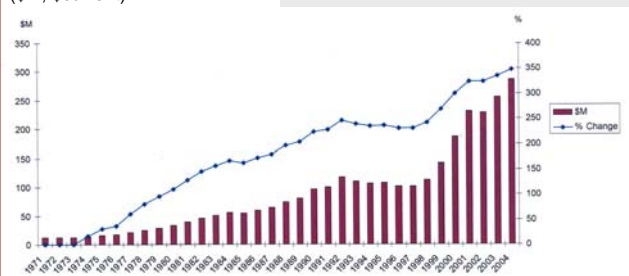
SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2003.

**CANADA**

Federal Funding for Post-Secondary Education Sector Research – NSERC (\$M, \$current)



Federal Funding for Post-Secondary Education Sector Research – SSHRC (\$M, \$current)



Source: Appendix 6, Fisher, et. al. 2006.

**Research & Development**  
 Gross domestic expenditure as a percentage of  
**GDP**

	1993	2000	2004
• Canada	1.70	1.93	1.93
• Mexico	0.22	0.37	0.40
• USA	2.52	2.74	2.68
• Note: Mexico 2006 was 0.38			

## PATENT FAMILIES 2002

- Canada 21.1
- Mexico .1
- USA 63.6

### Share of university research funded by industry (%) in 1996, 1990, and 1985

	1996	1990	1985
Canada	10.4	6.3	4.3
United States	5.8	4.7	3.8

Source: OECD 1998, p. 165

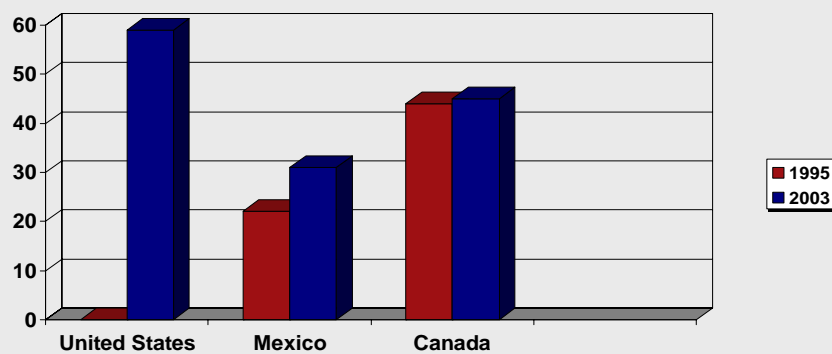
## Neoliberal state

- Funds are shifted away from students to research
  - Research as a whole has shifted from “curiosity driven research” to entrepreneurial research aimed at increasing national competitiveness

## Tertiary education

Share of private expenditure on educational institutions (1995, 2003)

Percentage



Source: OECD ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006))

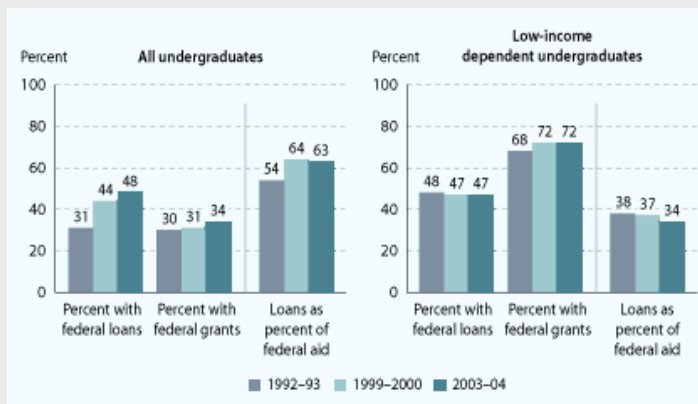
## Tertiary education

Trends in relative proportions of public expenditure<sup>1</sup> on educational institutions, for tertiary education (1995, 2000, 2001, 2002, 2003).

	1995 (%)	2000 (%)	2001 (%)	2002 (%)	2003 (%)
<b>Canada</b>	56.6	61.0	28.6	m	56.4
<b>Mexico</b>	77.4	79.4	70.4	71.0	69.1
<b>United States</b>	m	m	m	45.1	42.8
<b>OECD average</b>	81.2	80.2	80.0	78.1	76.2

<sup>1</sup>Public expenditure on educational institutions excludes international funds.  
 Source: OECD ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

## Student Debt Load:USA



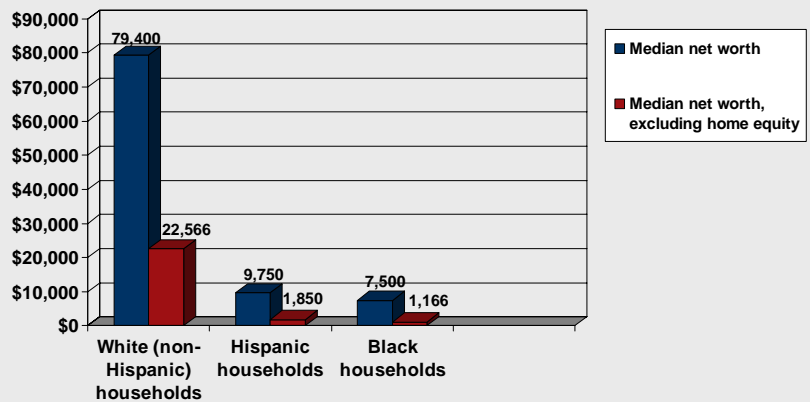


**Table 5: Distribution of income in the United States, 1982-2000**

	INCOME		
	Top 1 percent	Next 19 percent	Bottom 80 percent
<b>1982</b>	12.8%	39.1%	48.1%
<b>1988</b>	16.6%	38.9%	44.5%
<b>1991</b>	15.7%	40.7%	43.7%
<b>1994</b>	14.4%	40.8%	44.9%
<b>1997</b>	16.6%	39.6%	43.8%
<b>2000</b>	20.0%	38.7%	41.4%

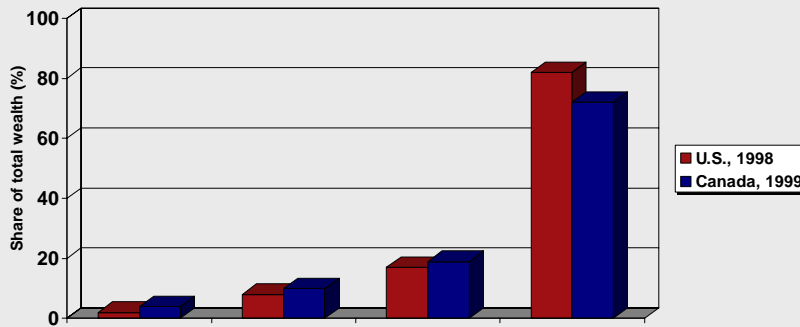
*Source: Wolff (2004)*

## HOUSEHOLD WORTH



## Inequality north and south of the border (Share of wealth held by quintile in US and Canada)

Wealth is very poorly distributed in the US, but Canada isn't much better. The richest 20 percent of family units in the US held about 83 per cent of the wealth in 1998, while the richest 20 percent of family units in Canada held about 70 percent of the wealth in 1999.



## Mexico: income distribution

- 80 -100% population = 58.2% of income
- 60- 80 = 19.2%
- 40- 60 = 11.8%
- 20- 40 = 7.2%
- 0- 20 = 3.6%

## Neoliberal state

- shifts public subsidy from welfare functions to entrepreneurial activity
- exhibits a preference for commercial solutions to public problems
- empowers managers rather than workers
- privileges the individual over collectivities when collectivities pursue activities that would constrain capital
- alters the boundaries between public and private sector in ways that enhance markets

## The “New” Regionalism

- Regionalism—EU, NAFTA, APEC—in the form of trading blocks is a building block of neoliberalism and changes the nature and form of the state
  - Regionalism presupposes a global economy
    - “In its more pronounced versions, this entity [global economy] is integrated outside of political mediations....The global economy is understood as a space of investment and trade flows that traverse nations states....Progress is to be sought by governing the conditions that affect these disembodied processes.” Larner and Walters 2002

## Globalism and regionalism are two sides of the same neoliberal coin

- At the global level, there is an overarching structure of free trade flows, multinational corporations, and some agencies of world government—GATT, GATTS, WTO
- These agencies are negotiating and regulatory venues, but their scope is limited with regard to implementation, enforcement, policing
- More trade occurs in bilateral and regional frameworks
- However these are crucial in terms of discursive ideas/practices pointing the way toward global free flows of dollars and trade.

## Regionalism promotes government that escapes state constraints

- The regionalist idea stems from (segments of) nation states seeking competitive advantage in global markets and as such as voluntaristic and based on choice. Nation states are not forced to join. Rather, regionalist networks gain strength because states do not want to be excluded. So, given that the EU and ASPEC and NAFTA are the three largest trading blocks and most of the world's trade occurs within them, a country like Mexico chooses to be in the NAFTA block, because to be excluded would be catastrophic.

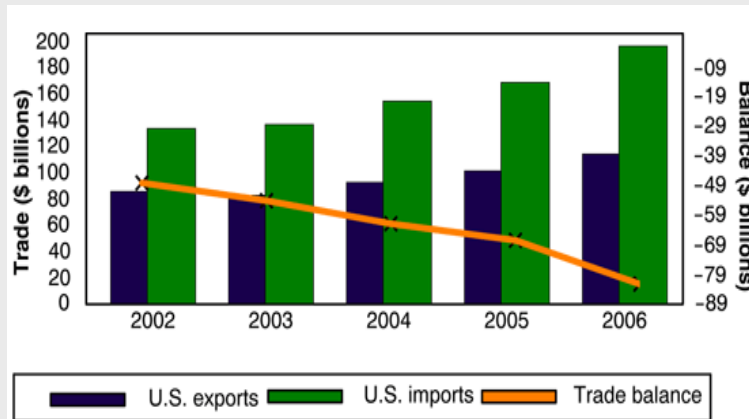
## Regional trading blocks often bring together unequal partners

- CANADA
- 25 percent of U.S. foreign trade is with Canada, with exports making up 2.5 percent of U.S. GDP
- “Canada is *dependent* on its trade with the United States: it sends 87 percent of its exports to U.S. markets, which comprises over 35 percent of Canadian GDP.”
  - Gilbert, 2005

## MEXICO

- 10.4 percent of U.S. foreign trade is with Mexico
- Mexico sends to U.S. about 60 percent of its exports
- Mexico is the third largest export destination for U.S. products, exceeded only by the EU and Canada
- At the moment the trade balance between Mexico and the U.S. is favorable to Mexico:
  - In 2006, U.S. exports to Mexico rose \$12.9 billion (13 percent) to \$114.6 billion, driven in part by economic growth in Mexico.
  - U.S. imports from Mexico increased by \$27.8 billion (17 percent) to \$197.1 billion in 2006.
- Nevertheless the main U.S. import from Mexico are energy related products whereas their exports to Mexico manufactures

## U.S. – MEXICO TRADE



Source: United States International Trade Commission, 2007.

## PRACTISES OF REGIONALISM

- “The functions that define regions are primarily, but not exclusively, economic.”
- Under regionalism. “. . .the market is *the* instrument of social order.” “With the rise of free trade areas, market activity is thus abstracted from pre-existing political contexts. It is also in the name of the market that regional organizations exercise and institutionalize authority over other “non-economic” areas of national life.
- “These flows [all forms of commercial and technical exchange, which are envisioned as beyond the formal boundaries of the state] and relationships do not simply reflect pre-existing common interests based on dense trading relations; rather, they are designed to ‘build’ the region by encouraging greater cooperation, harmonization, and a sense of ‘common purpose.’ State bureaucrats, market actors, and a diverse range of intermediary organizations join these processes ‘voluntarily.’ . . .regional government involves the removal of obstacles to the quasi-natural forces of trade and investment, i.e., their cultivation and nurturing.”
  - Larner and Walters, 2002

## NORTH AMERICAN FORMS OF REGIONALISM

- Preference for no trilateral government agencies
- Preference for working outside the legislative and judicial processes
  - Focus on executive branch and the administrative agencies it commands
  - Minimal investment in partner countries
- Proliferation of agreements, partnerships and bilateral arrangements

## The “subject” of North American regionalism

- “‘Homo economicus’ is thus both the target outcome of governance but also an idealized citizen-subject—autonomous, entrepreneurial and responsible; the success of these citizens in turn provides that rationalization for the state’s ability to govern in the name of ‘liberty,’ ‘freedom’ and ‘democracy.’”
- “Rational behavior is construed as *moral* behavior...”
- those who are deemed unable to manage themselves in rational and moral ways, who are not compliant—these are new undesirables.

## Security and Prosperity Partnership of North America (SPP)

- initiated by executive fiat on 23 March 2005, in TX, with prime ministers and president of Canada, Mexico and US.
  - cross border cooperation in some economic sectors;
  - harmonization of external tariffs;
  - more regulatory compatibility for goods and services;
  - more cooperation on energy production, development and security, joint border policies—particularly around pre clearance programs, and security issues;
  - the development of joint environmental programs towards the protection of biodiversity, and the coordination of a range of health initiatives, around infectious diseases and a safe food supply issues.



President George W. Bush stands with Mexican President Felipe Calderon, left, and Canadian Prime Minister Stephen Harper upon their arrival for dinner Monday, Aug. 20, 2007, during the North American Leaders' Summit at the Fairmont Le Chateau Montebello in Montebello, Canada.



## PROLIFERATING ORGANIZATIONS

- NAFTA
- Partnership for Prosperity
- Security and Prosperity Partnership of North America
- North American Council on Competitiveness
- 10 Prosperity Working groups
  - All of which recruit academics, experts, and bureaucrats to enact “homo economicus”

## “Investing in Our People”

- “Work through the Partnership for Prosperity and the Canada-Mexico Partnership to strengthen our cooperation in the development of human capital in North America, including by expanding partnerships in higher education, science and prosperity.”
- SPP, 2005

## Higher education is part of SPP

- “collaboration in higher education, especially when it can be instrumental to the above objectives...” SPP
- Some implications
  - Support for initiatives that strengthen market and security oriented science and technology
  - Strengthening of intellectual property and information technology
  - Increased marketization through creation of private and for-profit institutions of higher education that rely on intellectual property and information technology
    - Digital higher education
  - Increased reliance on tuition for financing in private and for-profit institutions

## Implications for higher education in all three countries

- Support for initiatives that strengthen market and security oriented science and technology
- Strengthening of intellectual property and information technology
- Increased marketization through creation of private and for-profit institutions of higher education that rely on intellectual property and information technology
  - Digital higher education
    - » Export or Import, depending on markets
- Increased reliance on tuition for financing in private and for-profit institutions

## Mexico & Human Capacity Building

- Partnership for Prosperity 2006: Report to the Presidents
  - University Partnerships: The alliances between Mexican and U.S. universities are aimed at identifying mutual development problems. Fourteen new university partnerships were launched in 2005 reaching 45 partnerships, including 17 states in Mexico and 14 states in the U.S. The program provides support for 400 students at a cost of 20 million. At present, these partnerships are implementing activities mainly on scientific and technological development and academic training in areas such as environment, rural development, education, business and public administration, among other areas.

## Post graduate and research funding

- In the framework of the Partnership, CONACYT signed between 2003 and 2005, 29 cooperation agreements with 22 universities of the United States, and three agreements with two US government agencies. These alliances have enhanced education in Mexico, financing 196 fellowships in masters and doctorate programs accounting for around 15 million.
- In December 2005, CONACYT and USAID concluded negotiation of a Memorandum of Understanding, which will be signed in 2006, to expand the benefits of TIES through the launch of a joint Request for Proposals with the objective of strengthening the national postgraduate system in Mexico.

## Science & Technology

- CONACYT also signed an agreement with the Fogarty International Center (FIC) to broaden cooperation in biomedical and behavioral sciences. This agreement includes co-financing in all FIC research and training programs, exchange of scientists, information exchange and joint research projects. To date, 10 projects are receiving financial support up to 300,000.
- CONACYT, the Coordinación General de los Institutos Nacionales de Salud (CGINS) and the National Institutes of Health (NIH), initiated a consultative process for the establishment of an agreement of cooperation in order to jointly participate in a collaborative training program to be called *The NIH-CONACYT/CGINS Research Career Transition Award Program*. A Memorandum of Understanding would be signed in 2006. The program will promote research training, professional growth and career development of Mexican Postdoctoral Fellows (MPF), as they move towards independent researchers and faculty members at academic institutions in Mexico. The five-year program encompasses two phases: The first two or three years, the MPF will act as visiting fellows at the NIH, while the remainder of the research training, the MPF will be a faculty fellow in Mexico.

## Recap: Implications for higher education in all three countries

- Support for initiatives that strengthen market and security oriented science and technology
- Strengthening of intellectual property and information technology
- Increased marketization through creation of private and for-profit institutions of higher education that rely on intellectual property and information technology
  - Digital higher education
    - » Export or Import, depending on markets
- Increased reliance on tuition for financing in private and for-profit institutions

## The struggle to preserve civil society and develop public good programs

- Target the middle class and working people
  - Social change in 20<sup>th</sup> and 21<sup>st</sup> century has depended on (under theorized) middle class
    - Succeeds when middle class align themselves with working and poor people
      - Mexico
      - Chile
      - Cuba
      - Nicaragua

## University must develop programs for target audience/participants

- Research
  - Public health
    - Mosquito control that limits disease
      - Patented by universities and distributed by corporations that build social capital
    - Pharmaceuticals for common problems
  - Energy: alternatives
    - Especially those that do not lend themselves to control by large corporations or the state
      - Solar
      - Hydrogen

## Teaching

- New “packages” for professionals
  - MBAs—focus on social capital
    - Microeconomics
      - Small loans
  - Medicine
    - Cuba style doctors
    - Barefoot doctors (China)

## Service

- Social capital corporations that provide clinics, field office for small loan programs
- Open source internet alternatives
- Policy alternatives
  - To which many academics subscribe