

What does Mexico Need to Do to Grow like a Latin American Puma?

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Football and economics

Mexico 4, Brazil 2

Aug 11th 2012, 20:41 by T.W. | MEXICO CITY

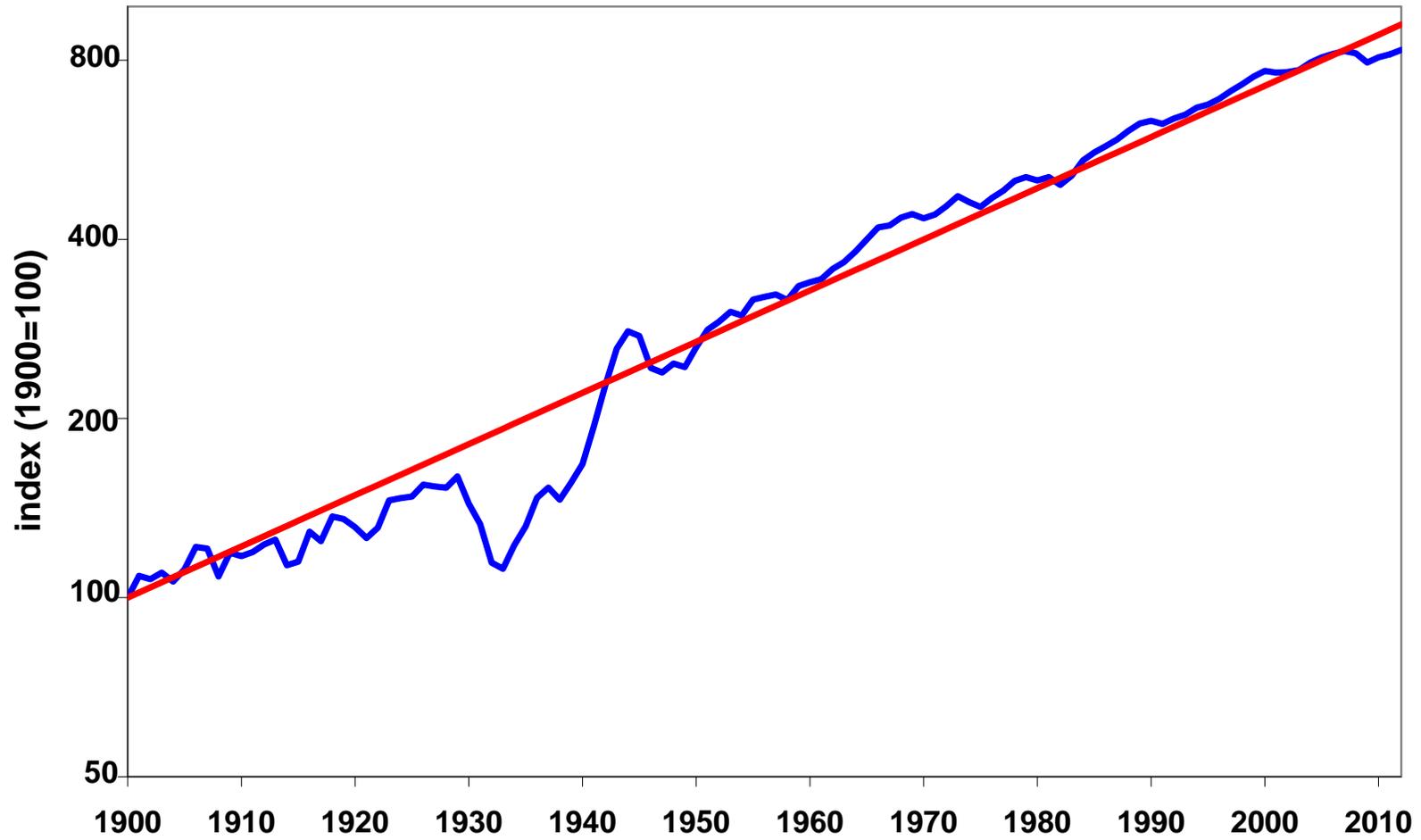
This blog's headline isn't a misprint, but a reference to the score in a longer-term competition: economic growth. In recent years Brazil has outplayed Mexico, growing at 6% or more as Mexico bumped along in the slow lane. But lately that has changed... One reason for the turnaround is China. Its growth has been a boon to Brazilian commodity exporters (who have made a fortune feeding the Chinese economy) and a headache for Mexican manufacturers (who face stiffer competition from Chinese companies in the United States). But with China slowing down, the tables are turned...

Based on

Timothy J. Kehoe and Felipe Meza, “Catch-up Growth Followed by Stagnation: Mexico, 1950–2010,” *Latin American Journal of Economics*, 48 (2011), 227–268.

Timothy J. Kehoe and Kim J. Ruhl, “Why Have Economic Reforms in Mexico Not Generated Growth?” *Journal of Economic Literature*, 48 (2010), 1005–1027.

Real GDP per working-age person in the United States



A digression on economic growth:

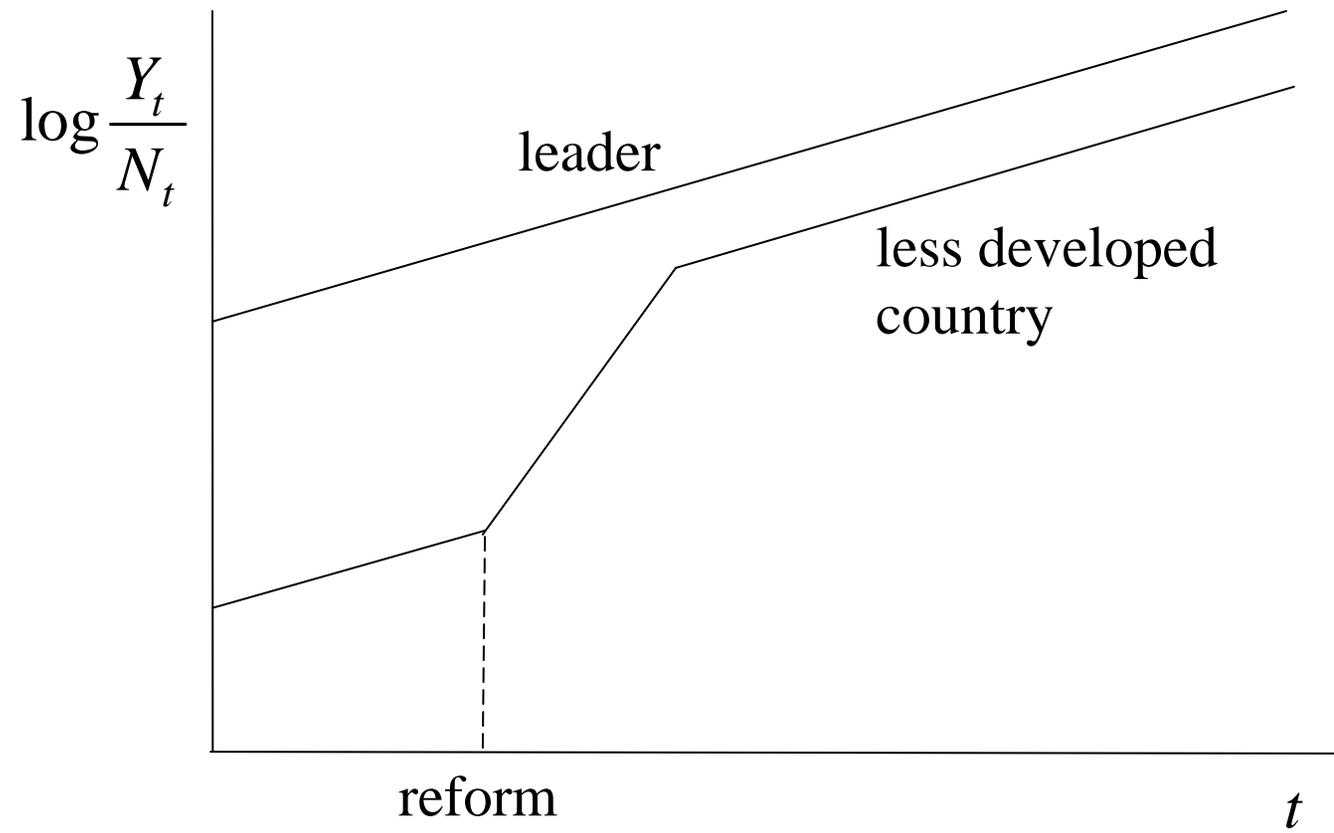
Real GDP per working-age person has grown by 2 percent per year in the United States since 1875.

This growth is a combination of technological progress and improvements in management.

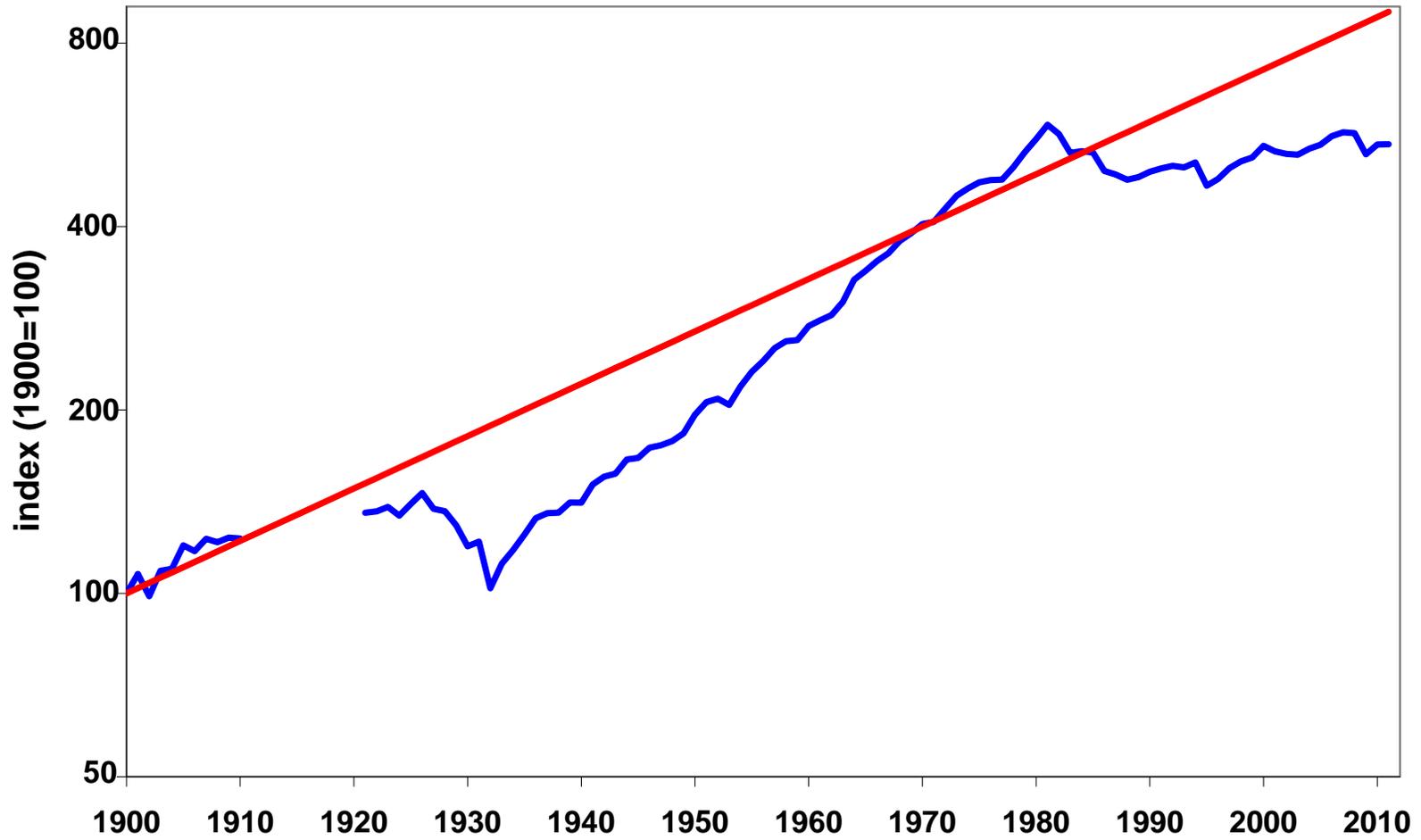
Any country with stable institutions and policies should grow at roughly 2 percent per year.

A country that improves its institutions and policies should grow faster, until it reaches a new balanced growth path.

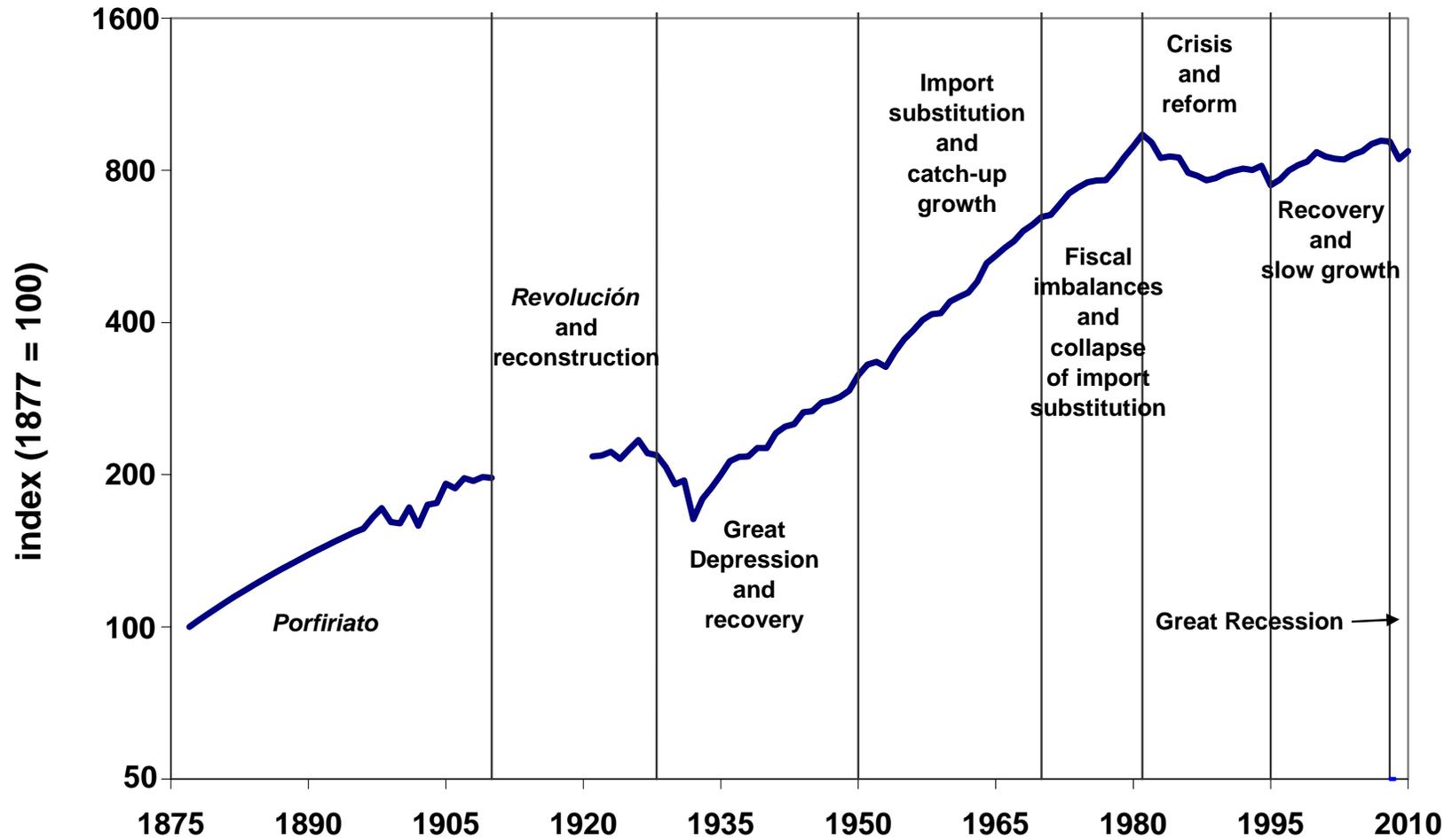
A country whose institutions deteriorate or whose policies worsen...



Real GDP per working-age person in Mexico

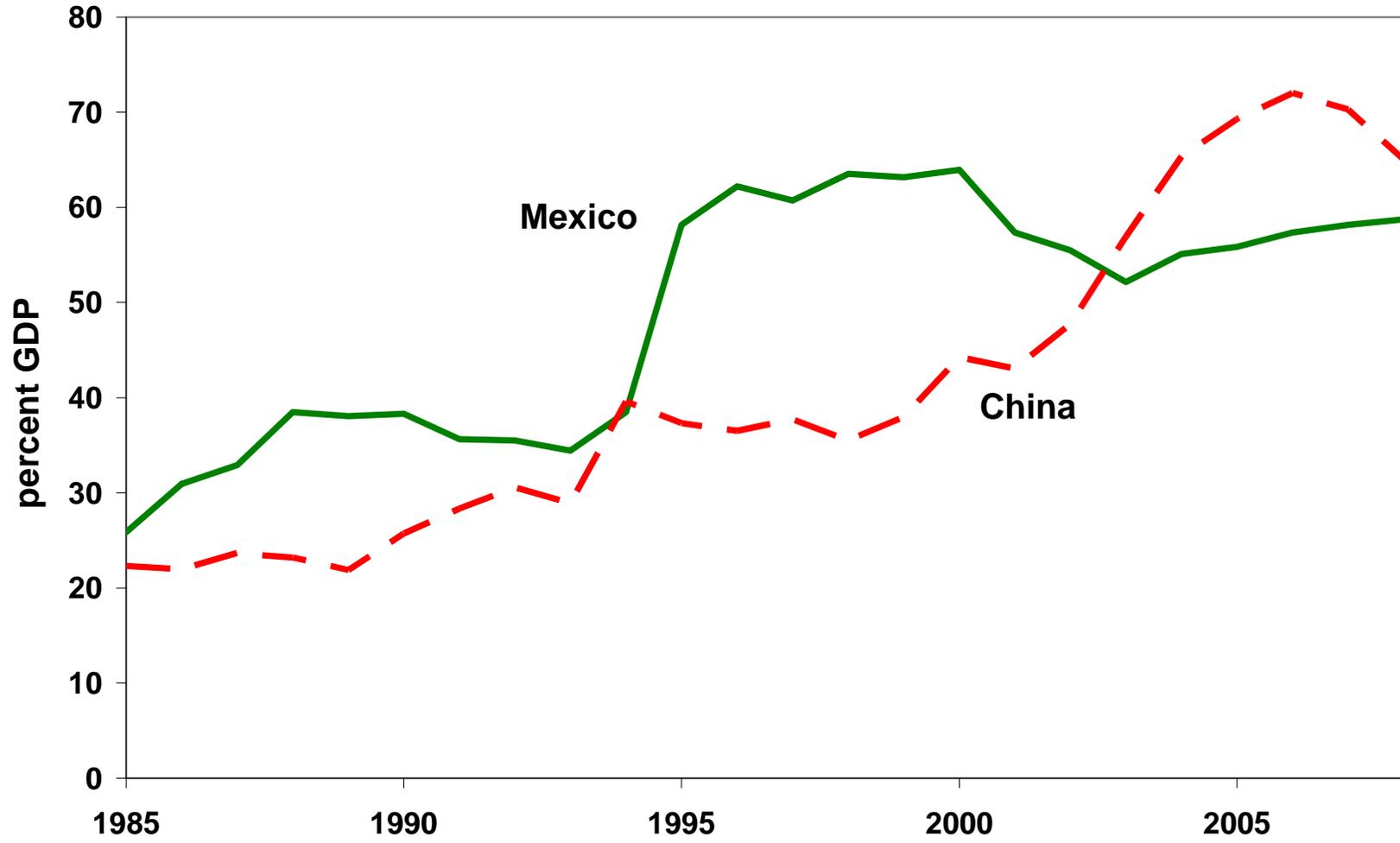


Mexican economic history, 1877–2010

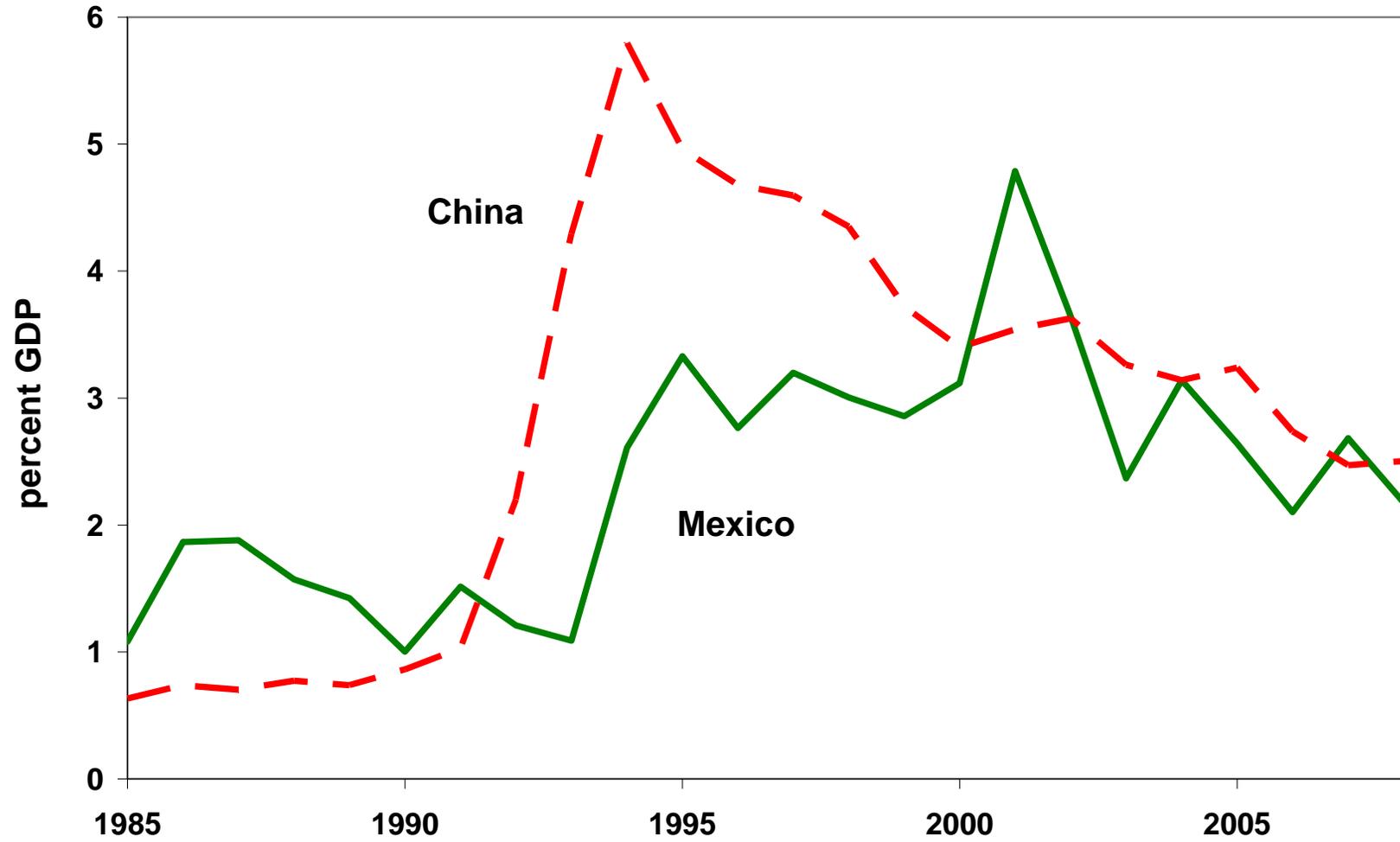


Between 1984 and 1995, Mexico implemented an impressive set of economic reforms, yet its growth has been modest compared to that of China...

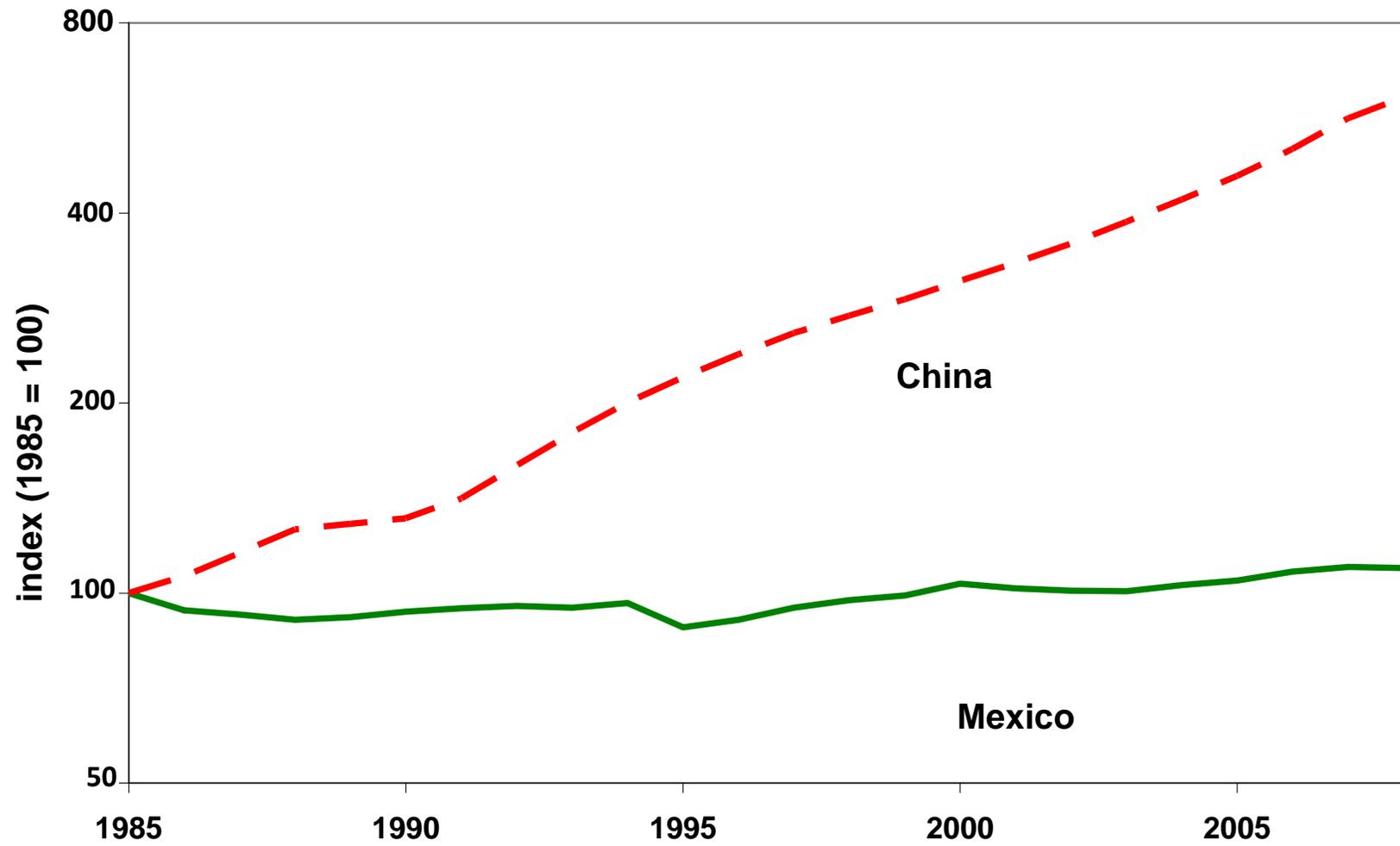
Trade in Mexico and China



FDI inflows to Mexico and China



Real GDP per working-age person in Mexico and China



Did Mexico gain from trade?

“The evidence points overwhelmingly to the conclusion that Mexico’s reforms, backed by NAFTA, have largely been a disappointment for the country. Despite dramatic increases in trade and foreign investment, economic growth has been slow and job creation has been weak.”

Zepeda, E., T.A. Wise, and K.P. Gallagher, (2009)

“Rethinking Trade Policy for Development: Lessons from Mexico under NAFTA.”

The empirics: Does trade cause growth?

Yes!

Sachs and Warner (1995), Frankel and Romer (1999), Hall and Jones (1999), Alcalá and Ciccone (2004), Dollar and Kraay (2004)...

No!

Rodriguez and Rodrik (2001), Rodrik, Subramanian, and Trebbi (2002), Yanikkaya (2003) [developing countries], DeJong and Ripoll (2006) [developing countries] ...

Sources of Growth

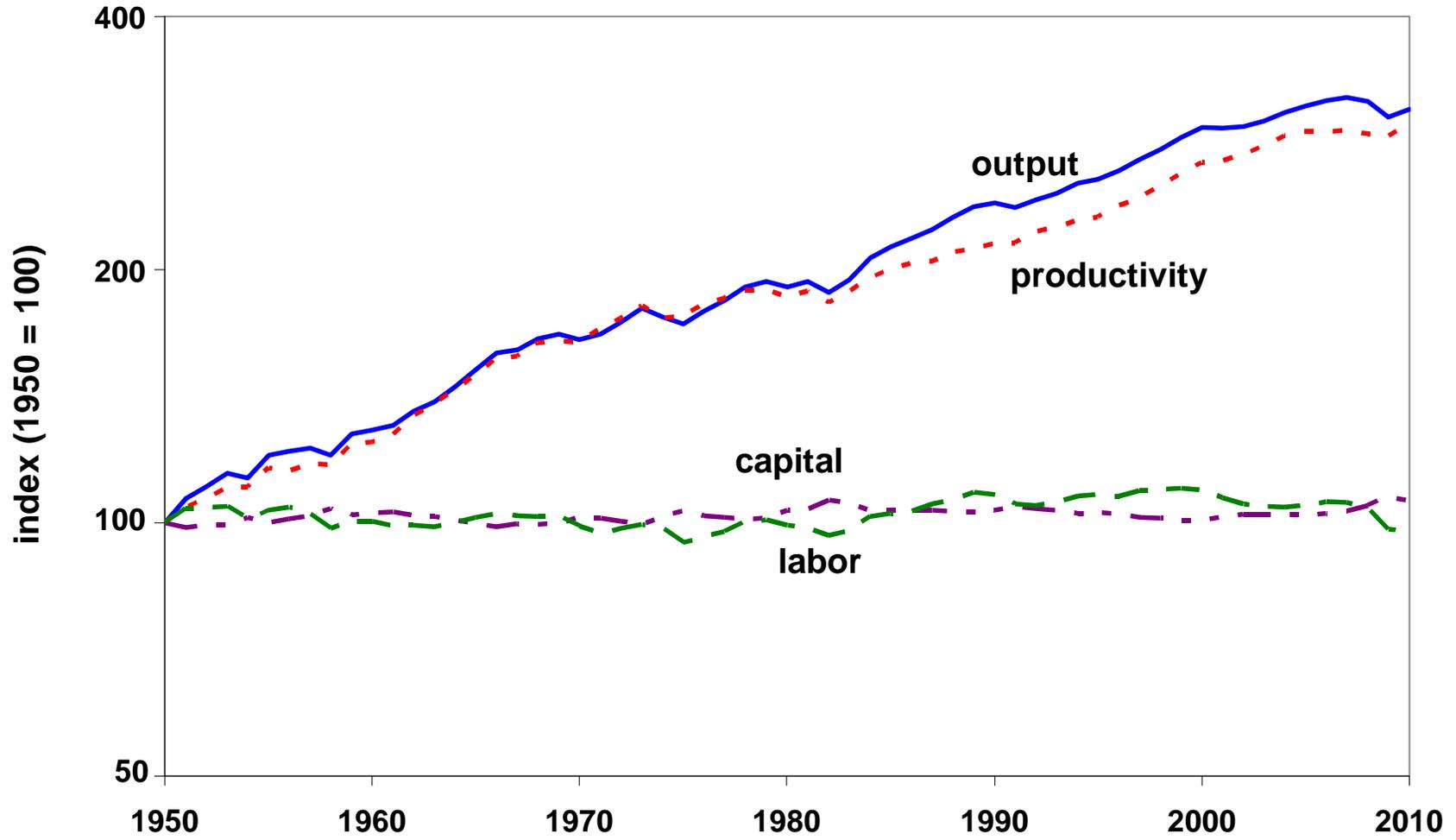
$$Y_t = A_t K_t^\alpha L_t^{1-\alpha}$$

$$\frac{Y_t}{N_t} = A_t^{\frac{1}{1-\alpha}} \left(\frac{K_t}{Y_t} \right)^{\frac{\alpha}{1-\alpha}} \left(\frac{L_t}{N_t} \right)$$

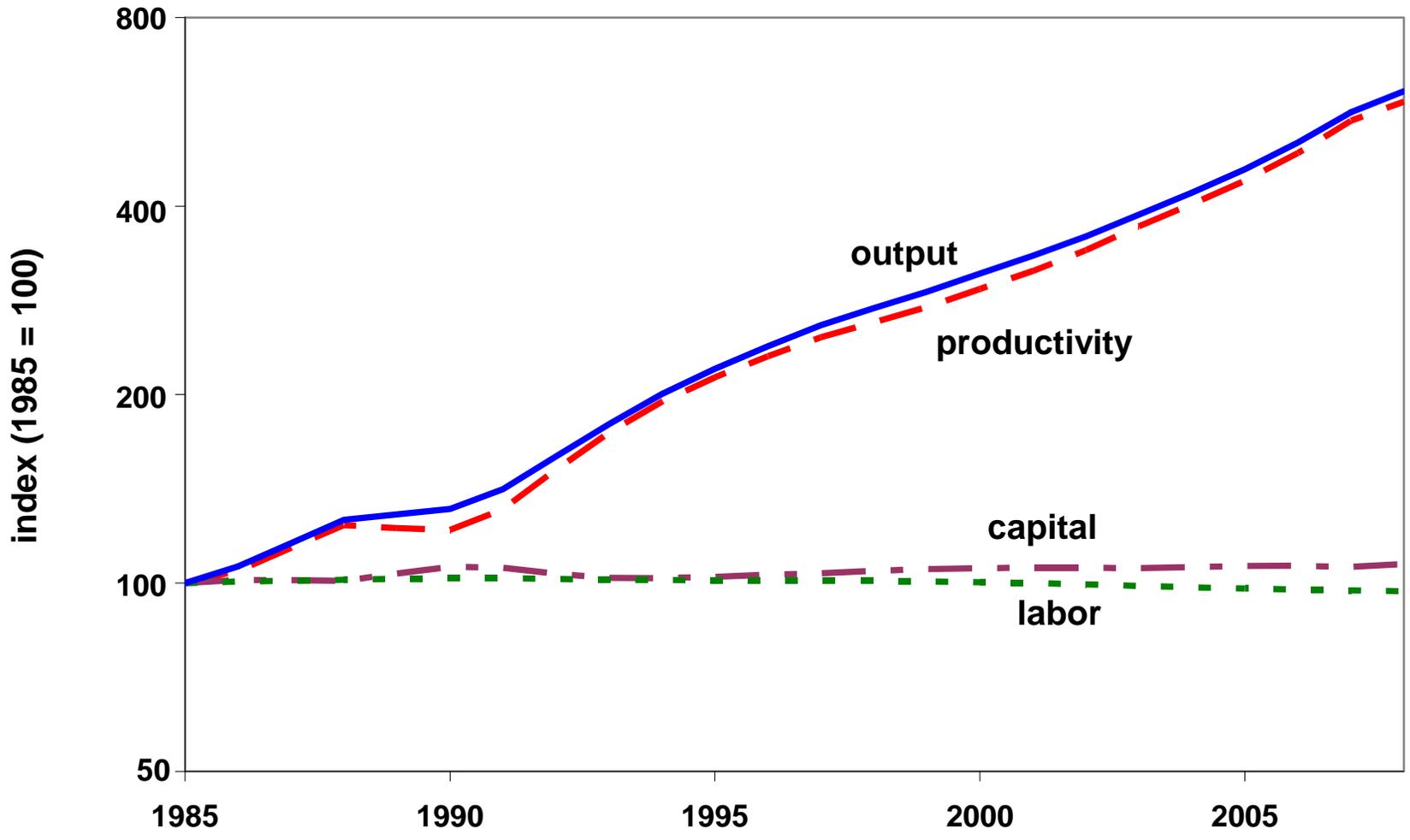
William Lewis (2005), *The Power of Productivity: Wealth, Poverty, and the Threat to Global Stability*.

Best practice

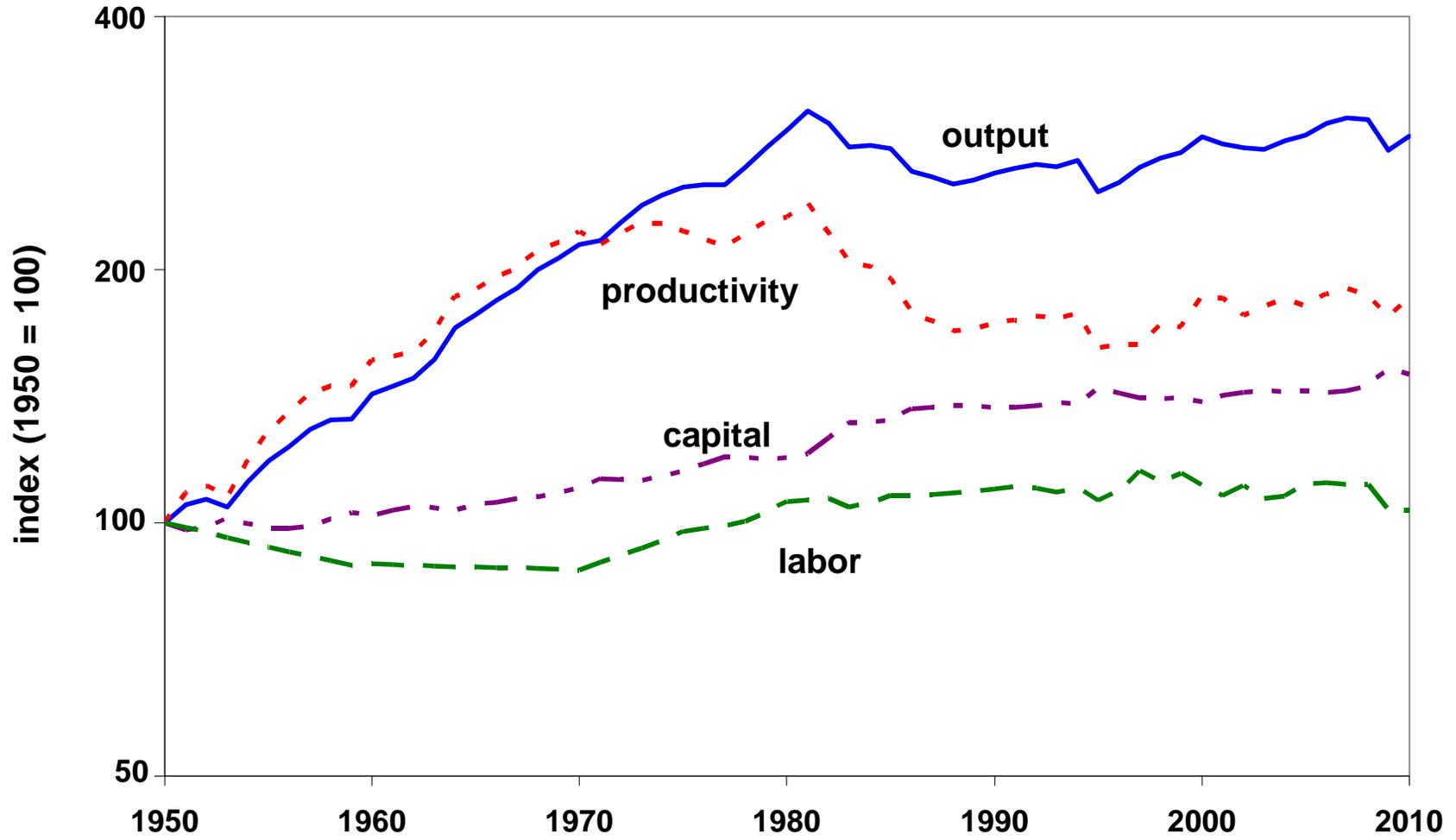
Growth accounting for the United States



Growth accounting for China



Growth accounting for Mexico

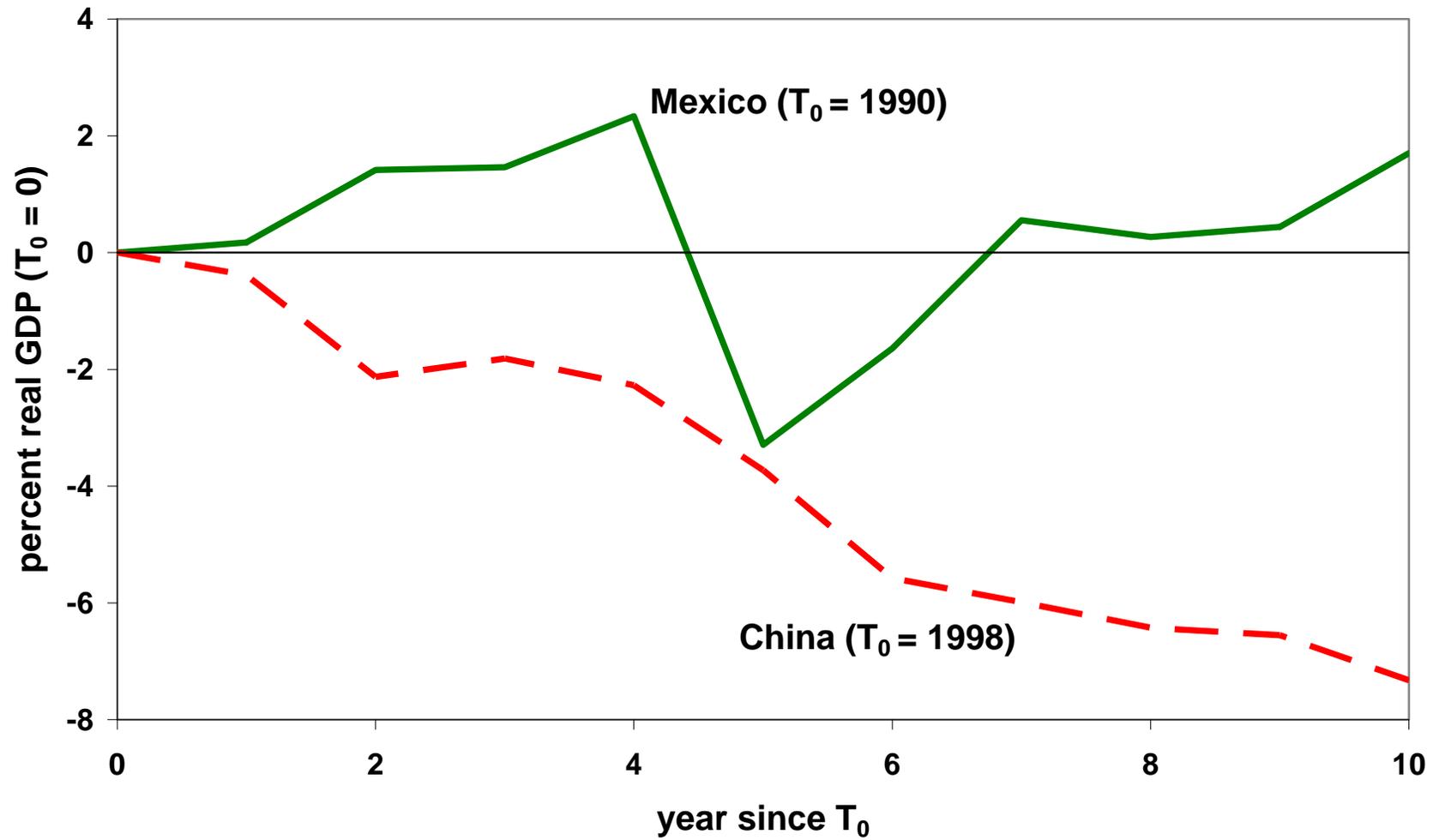


Gains from trade

Real GDP growth versus real income growth in Mexico and China

Annual growth rate (percent)	Real GDP per capita	Terms of trade premium	Gain from variety	Real income per capita
China 1998-2008	8.989	-0.761	0.101	8.329
Mexico 1990-2000	1.782	0.169	0.142	2.093

Terms of trade premium in Mexico and China



**Standard trade theory does not explain
this productivity growth.**

What theories of openness can do so?

Induced technological change: Costantini-Melitz (2007),
Gibson (2007), Holmes-Schmitz (2001), Schmitz (2005)

Technology transfer through FDI: Helpman-Melitz-Yeaple (2004),
McGrattan-Prescott (2007), Ramondo-Rodriguez-Clare (2008)

Incentives for internal reforms: Bajona-Chu (2008)

Douglass C. North, “Sources of Productivity Change in Ocean Shipping, 1600-1850,” *Journal of Political Economy*, 1968.

The conclusion that emerges from this study is that a decline in piracy and an improvement in economic organization account for most of the productivity change observed.

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We have to identify and eliminate the pirates!



We have to identify and eliminate the pirates!

Stephen L. Parente and Edward C. Prescott, “Barriers to Technology Adoption and Development,” *Journal of Political Economy*, 102 (1994), 298–321.

High levels of productivity are the result of allocating resources — labor and capital — to efficient firms

Increases in productivity are the result of birth and growth of newer, more productive firms and death of older, less productive firms.

A useful data source for data on ease of allocating resources across firms and creating new firms: World Bank, *Doing Business*

The Doing Business project provides objective measures of business regulations for local firms in 185 economies and selected cities at the subnational level.



DOING BUSINESS 2013

**Smarter Regulations for
Small and Medium-Size Enterprises**

2007 2012
2005 2009 2004 2011
2008 2006 2010 2013

COMPARING BUSINESS REGULATIONS FOR DOMESTIC FIRMS IN 185 ECONOMIES

10TH EDITION

TABLE 1.1 Rankings on the ease of doing business

Rank	Economy	DB2013 reforms	Rank	Economy	DB2013 reforms	Rank	Economy	DB2013 reforms
1	Singapore	0	63	Antigua and Barbuda	0	125	Honduras	0
2	Hong Kong SAR, China	0	64	Ghana	0	126	Bosnia and Herzegovina	2
3	New Zealand	1	65	Czech Republic	3	127	Ethiopia	1
4	United States	0	66	Bulgaria	1	128	Indonesia	1
5	Denmark	1	67	Azerbaijan	0	129	Bangladesh	1
6	Norway	2	68	Dominica	1	130	Brazil	1
7	United Kingdom	1	69	Trinidad and Tobago	2	131	Nigeria	0
8	Korea, Rep.	4	70	Kyrgyz Republic	0	132	India	1
9	Georgia	6	71	Turkey	2	133	Cambodia	1
10	Australia	1	72	Romania	2	134	Tanzania	1
11	Finland	0	73	Italy	2	135	West Bank and Gaza	1
12	Malaysia	2	74	Seychelles	0	136	Lesotho	2
13	Sweden	0	75	St. Vincent and the Grenadines	0	137	Ukraine	3
14	Iceland	0	76	Mongolia	3	138	Philippines	0
15	Ireland	2	77	Bahamas, The	0	139	Ecuador	0
16	Taiwan, China	2	78	Greece	3	140	Sierra Leone	2
17	Canada	1	79	Brunei Darussalam	2	141	Tajikistan	1
18	Thailand	2	80	Vanuatu	0	142	Madagascar	1
19	Mauritius	2	81	Sri Lanka	4	143	Sudan	0
20	Germany	2	82	Kuwait	0	144	Syrian Arab Republic	1
21	Estonia	0	83	Moldova	2	145	Iran, Islamic Rep.	1
22	Saudi Arabia	2	84	Croatia	1	146	Mozambique	0
23	Macedonia, FYR	1	85	Albania	2	147	Gambia, The	0
24	Japan	1	86	Serbia	3	148	Bhutan	0
25	Latvia	0	87	Namibia	1	149	Liberia	3
26	United Arab Emirates	3	88	Barbados	0	150	Micronesia, Fed. Sts.	0
27	Lithuania	2	89	Uruguay	2	151	Mali	1
28	Switzerland	0	90	Jamaica	2	152	Algeria	1
29	Austria	0	91	China	2	153	Burkina Faso	0
30	Portugal	3	92	Solomon Islands	0	154	Uzbekistan	4
31	Netherlands	4	93	Guatemala	1	155	Bolivia	0
32	Armenia	2	94	Zambia	1	156	Togo	1
33	Belgium	0	95	Maldives	0	157	Malawi	1
34	France	0	96	St. Kitts and Nevis	0	158	Comoros	2
35	Slovenia	3	97	Morocco	1	159	Burundi	4
36	Cyprus	1	98	Kosovo	2	160	São Tomé and Príncipe	0
37	Chile	0	99	Vietnam	1	161	Cameroon	1
38	Israel	1	100	Grenada	1	162	Equatorial Guinea	0
39	South Africa	1	101	Marshall Islands	0	163	Lao PDR	3
40	Qatar	1	102	Malta	0	164	Suriname	0
41	Puerto Rico (U.S.)	1	103	Paraguay	0	165	Iraq	0
42	Bahrain	0	104	Papua New Guinea	0	166	Senegal	0
43	Peru	2	105	Belize	1	167	Mauritania	0
44	Spain	2	106	Jordan	0	168	Afghanistan	0
45	Colombia	1	107	Pakistan	0	169	Timor-Leste	0
46	Slovak Republic	4	108	Nepal	0	170	Gabon	0
47	Oman	1	109	Egypt, Arab Rep.	0	171	Djibouti	0
48	Mexico	2	110	Costa Rica	4	172	Angola	1
49	Kazakhstan	3	111	Palau	0	173	Zimbabwe	0
50	Tunisia	0	112	Russian Federation	2	174	Haiti	0
51	Montenegro	2	113	El Salvador	1	175	Benin	4
52	Rwanda	2	114	Guyana	0	176	Niger	1
53	St. Lucia	0	115	Lebanon	0	177	Côte d'Ivoire	0
54	Hungary	3	116	Dominican Republic	0	178	Guinea	3
55	Poland	4	117	Kiribati	0	179	Guinea-Bissau	0
56	Luxembourg	0	118	Yemen, Rep.	0	180	Venezuela, RB	0
57	Samoa	0	119	Nicaragua	0	181	Congo, Dem. Rep.	1
58	Belarus	2	120	Uganda	1	182	Eritrea	0
59	Botswana	1	121	Kenya	1	183	Congo, Rep.	2
60	Fiji	1	122	Cape Verde	0	184	Chad	1
61	Panama	3	123	Swaziland	1	185	Central African Republic	0
62	Tonga	0	124	Argentina	0			

Note: The rankings for all economies are benchmarked to June 2012 and reported in the country tables. This year's rankings on the ease of doing business are the average of the economy's percentile rankings on the 10 topics included in this year's aggregate ranking. The number of reforms excludes those making it more difficult to do business.

Source: *Doing Business* database.

Rankings on Doing Business

Singapore	1
United States	4
Canada	17
Germany	20
Spain	44
Mexico	48
Kazakhstan	49
Jamaica	90
China	91
Afghanistan	168
Zimbabwe	173
Central African Republic	185

What are the barriers to growth in Mexico?

Poor financial institutions

Lack of contract enforcement

Problems in labor markets

...also problems with crime

But China has many of these same sorts of problems

Poor financial institutions

Lack of contract enforcement

Problems in labor markets

...also problems with the political system

But why is China growing so rapidly?

But why is China growing so rapidly?

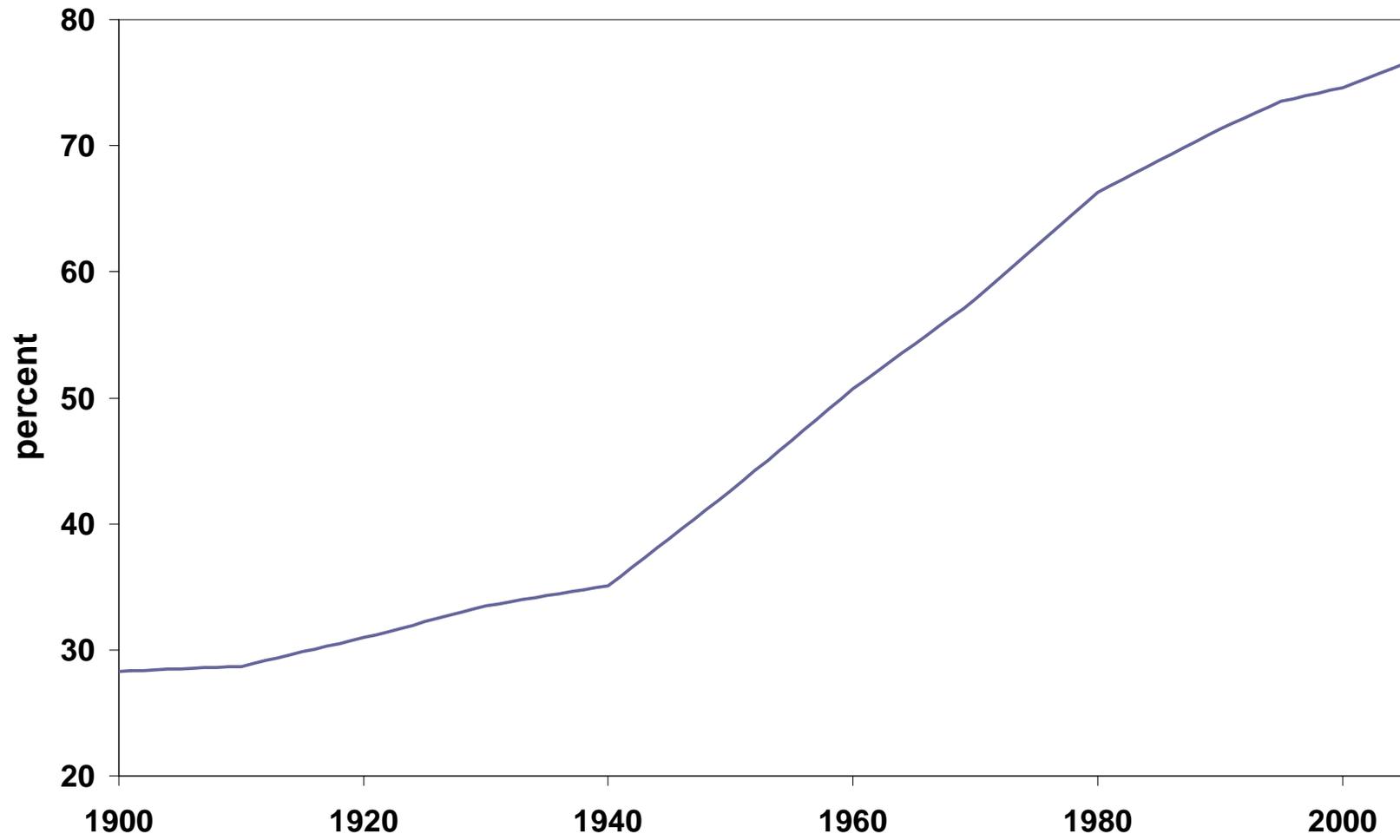
For the same reasons that Mexico grew rapidly between 1950 and 1980:

Urbanization

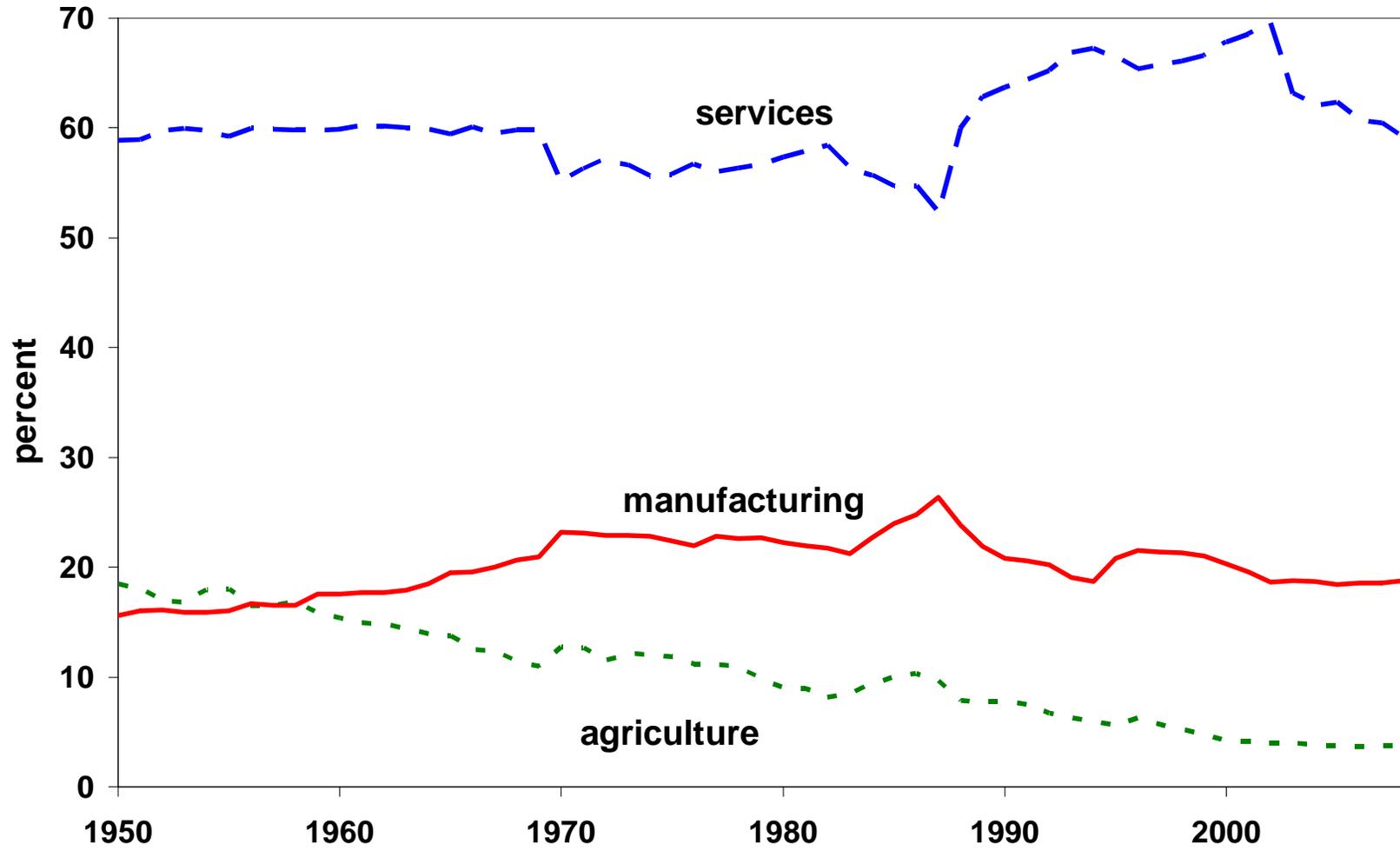
Industrialization

Basic education

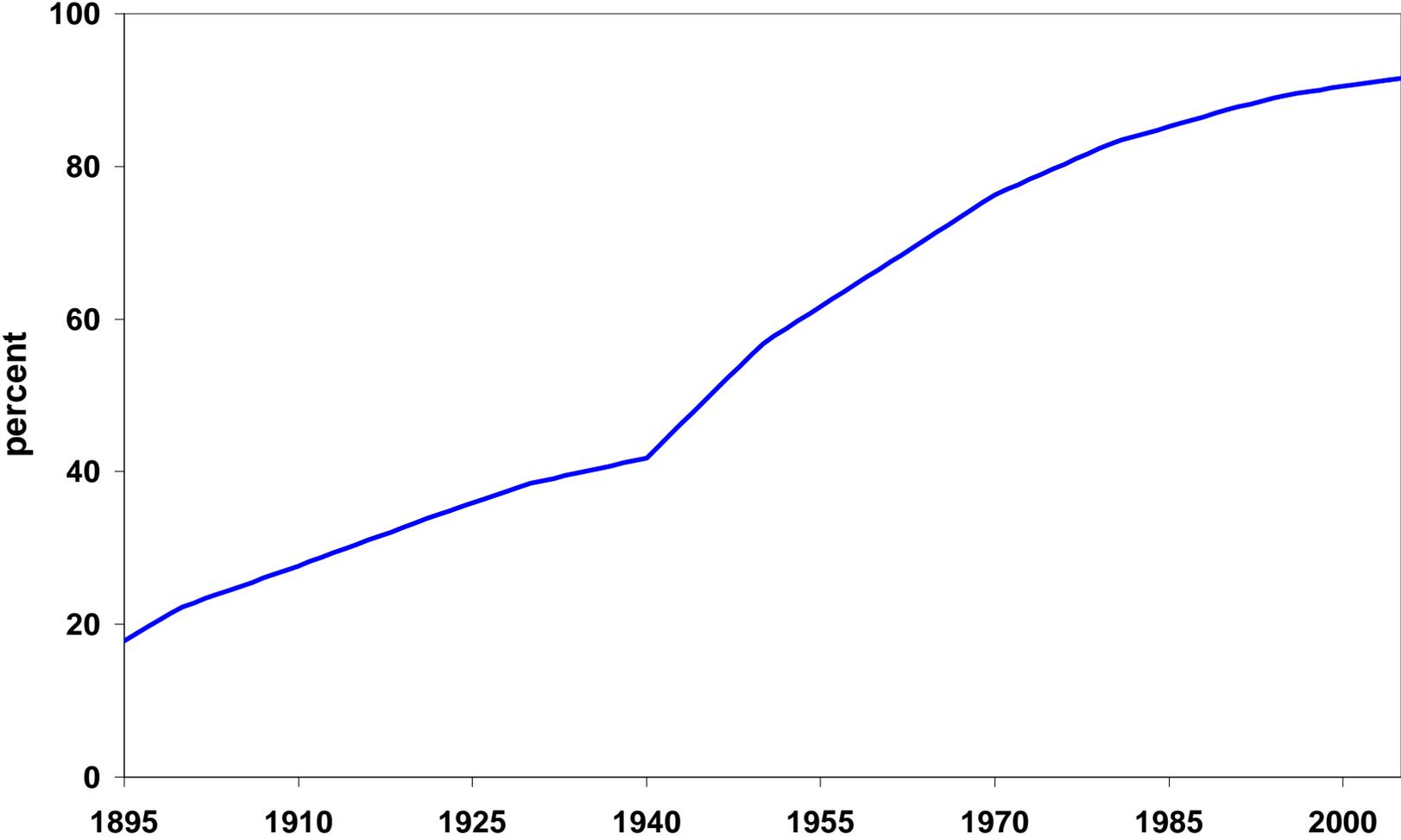
Urban population Mexico



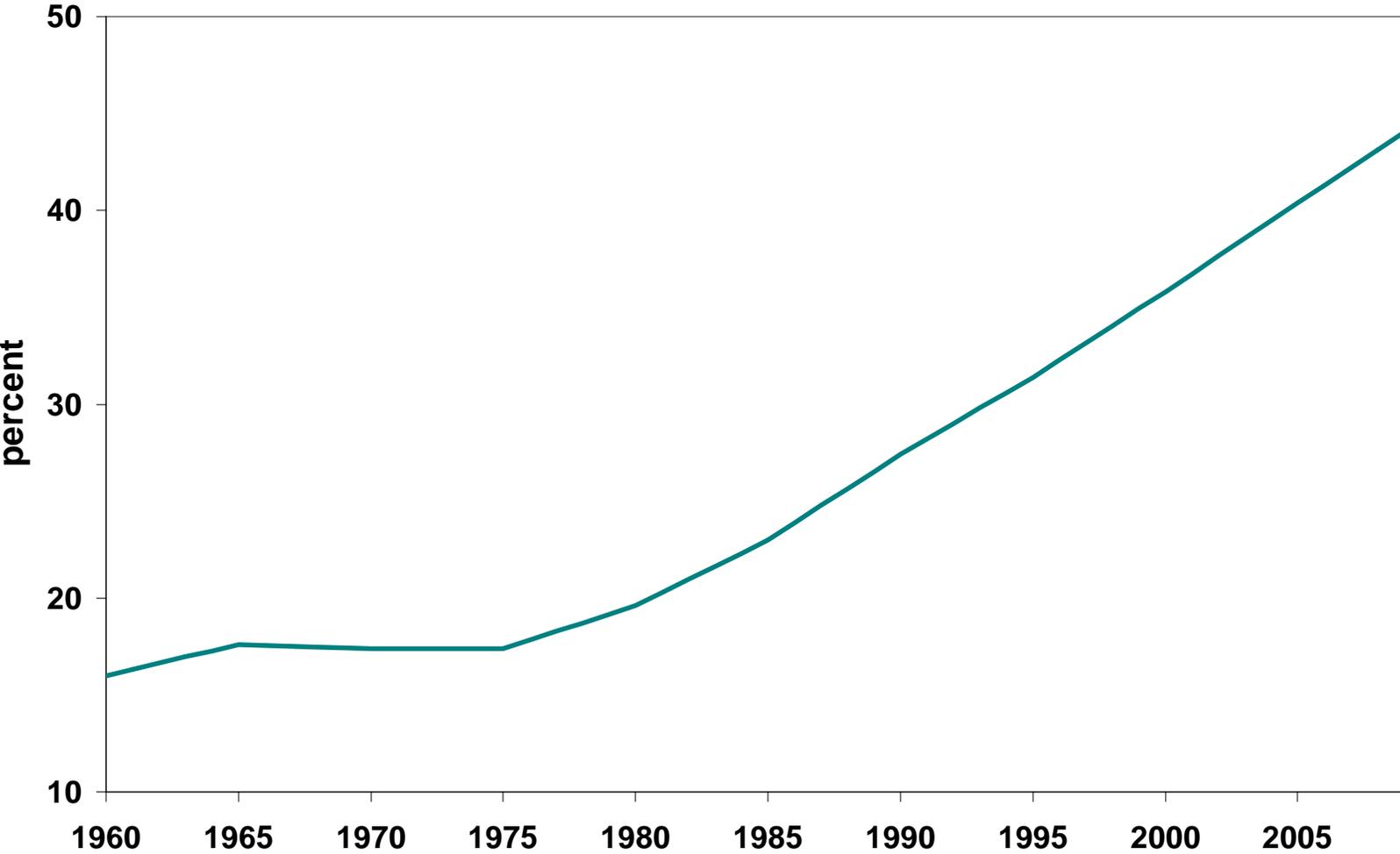
Composition of GDP in Mexico



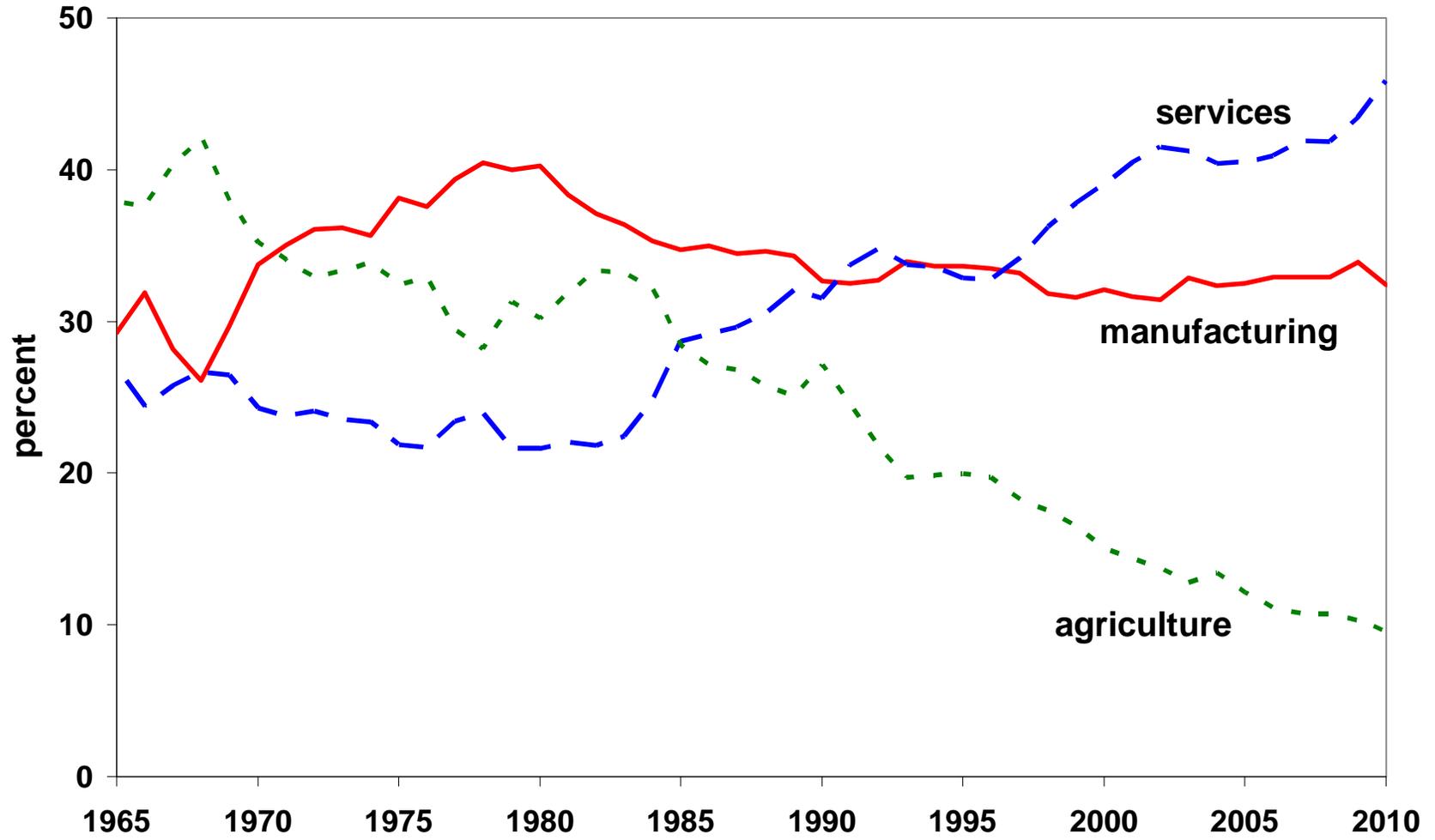
Literacy rate, population age 10 and older in Mexico



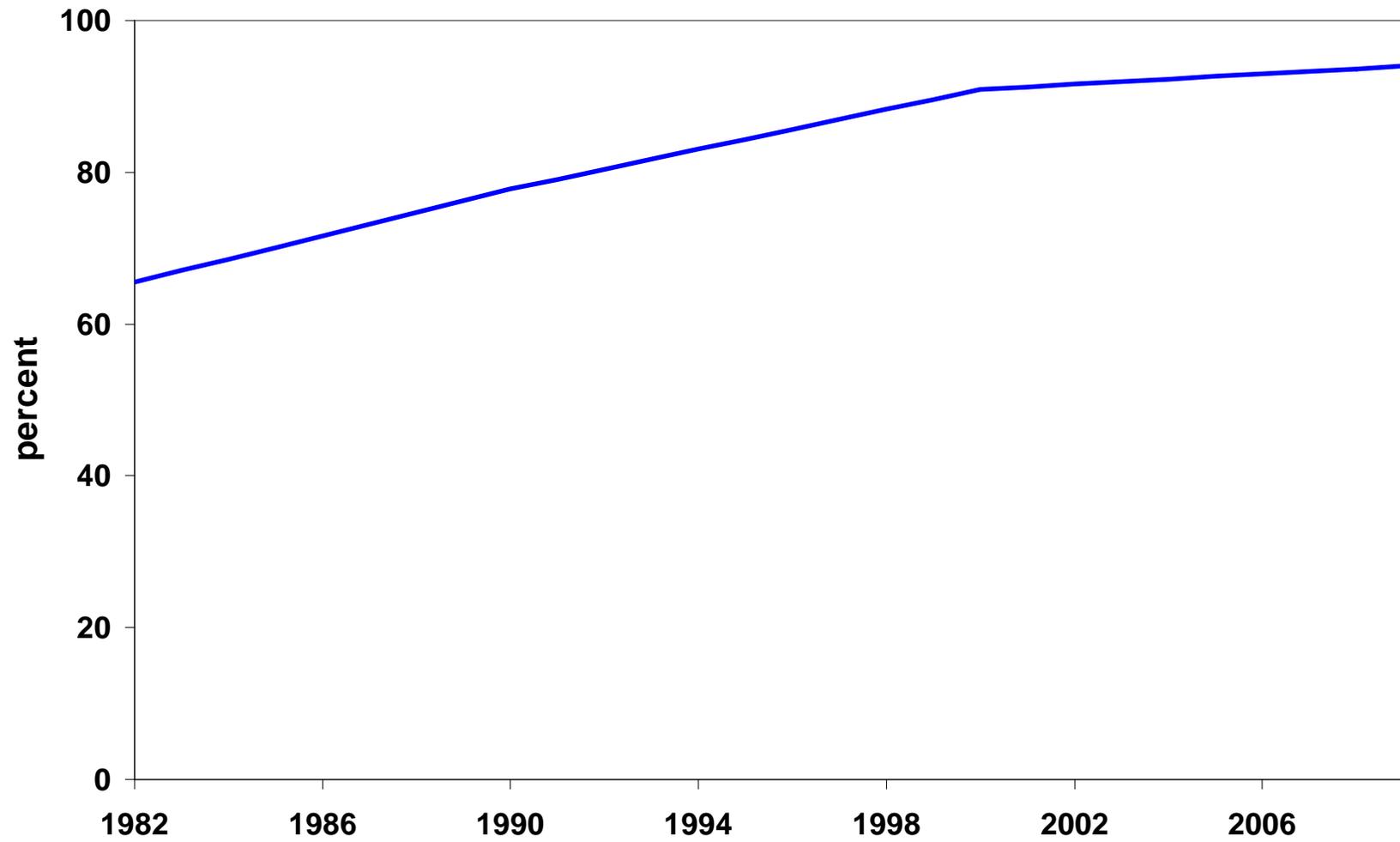
Urban population in China



Composition GDP in China



Literacy rate, population age 15 and older in in China



But why is China growing so rapidly?

For the same reasons that Mexico grew rapidly between 1950 and 1980:

Urbanization

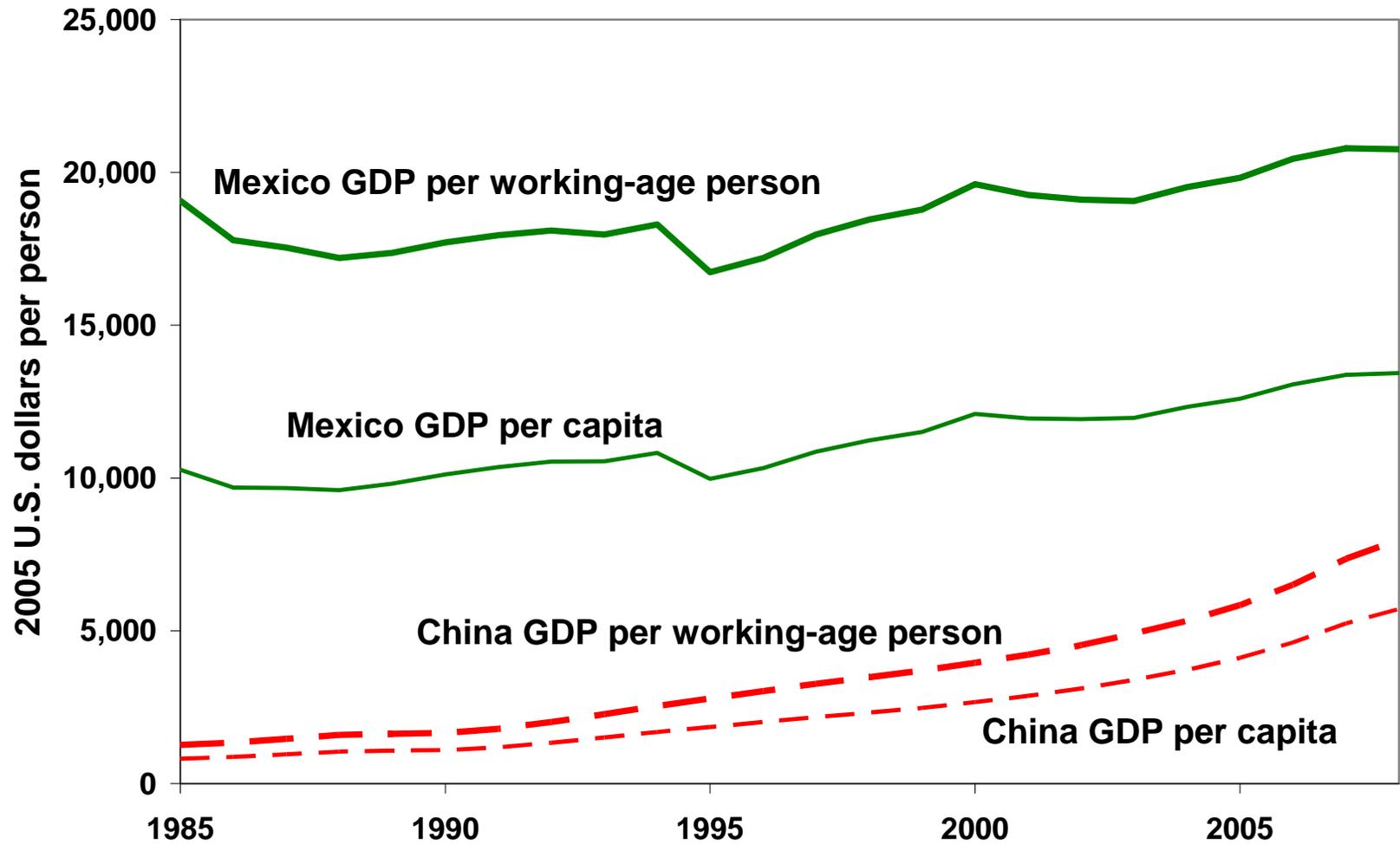
Industrialization

Basic education

Hypothesis: Mexico would have grown more rapidly between 1950 and 1980 if it had been open to foreign trade and investment.

When will the barriers to growth that are limiting Mexico's growth start to bind on China?

Purchasing power parity GDP in Mexico and China



When will the barriers to growth that are limiting Mexico's growth start to bind on China?

Hypothesis: Absent major reforms, China's growth will slow to about 2 percent per year within the next 10, perhaps before China reaches the level of real GDP per working-age person of Mexico.

What reforms does Mexico need to resume rapid growth?

Eliminate barriers to growth:

Reform financial institutions

Improve contract enforcement and rule of law

Make labor markets more flexible

What reforms does Mexico need to resume rapid growth?

Eliminate barriers to growth:

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Also

Reduce monopoly and inefficiencies in nonmanufacturing sectors like electricity, telecommunications, transportation, and petroleum extraction.

Reduce violence related to drug trafficking.