From: Stephen Haber, Herbert Klein, Noel Maurer and Kevin Middlebrook, *The Second Mexican Revolution: Politics, Economics, and Society Since 1982*. Please do not cite or quote without permission.

Chapter Two:

Mexico Before 1982:

The Political Economy of Authoritarian Rule

Mexico experienced major economic and political transformations during the 1980s and 1990s that ushered in an open economy and electoral democracy. A balanced assessment of both the importance and the limits of these changes requires an understanding of Mexico's political economy before 1982.

Twice in its history, Mexico was governed by consolidated and durable authoritarian regimes. The first was the dictatorship of Porfirio Díaz (1876-1911, a period known as the Porfiriato); the second was the party-based authoritarian regime that took shape in the aftermath of Mexico's 1910-1920 revolution and held sway until the election of Vicente Fox in 2000. These two regimes differed greatly in their degree of political institutionalization, their social bases, and their resilience in the face of pressures for change. Both regimes also had a good deal in common: they produced long periods of stable government, centralized political power in the presidency, and pursued protectionist economic policies. Both regimes also produced a highly unequal distribution of the benefits of economic growth—a direct result of the fact that they allocated public policies and property rights selectively, so as to benefit primarily the core members of the coalitions that supported them.

Mexico from Independence to the Revolution of 1910

Mexico achieved independence from Spain in 1821, but independence did not produce a stable political order. Political disagreements were often settled through violence, which meant that in the 55 years from independence to 1876, Mexico had 75 presidents. One military strongman, Antonio López de Santa Anna, occupied the presidential palace on 11 different occasions. In the absence of a stable national government, Mexico's border states seceded almost at will. Texas seceded in 1836, and Yucatán left the Mexican federation in 1840, only to rejoin later of its own volition. The weakness of the Mexican state made the country vulnerable to invasion—first by the United States in 1846, which took approximately half of Mexico's territory in the peace settlement, and then by France in 1862, which ruled Mexico through a puppet, the Austrian Archduke Maximilian, until 1867.

Mexico's long cycle of coups d'état came to an end in 1876 when General Porfirio Díaz, a hero of the resistance to the French occupation, took power in a military coup. Except for a brief interregnum between 1880 and 1884, when Díaz temporarily ceded formal authority to an ally, he retained the presidency until 1911. During his long reign, Díaz succeeded where his predecessors had failed to create political stability. He did this by rigging elections, repressing the opposition, and, most crucially, forging a political and economic system based on cronyism.

During the Porfiriato the Mexican economy grew rapidly. When Díaz came to power, Mexico had only five banks, a minuscule manufacturing sector, and a railroad system that consisted of some four hundred miles of track. The economy was heavily dominated by agriculture, which used almost the same technologies it had employed

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since the sixteenth century. By the time Díaz was forced into exile in 1911, Mexico had a sizable banking system, a manufacturing sector that produced a broad range of consumer and intermediate goods in large-scale factories, and a railroad system some 12,000 miles in length. Mexico had also become one of the world's leading metals producers, and was emerging as a major petroleum exporter.

Much of the Mexico's economic transformation under Díaz was the product of the selective specification and enforcement of property rights. Porfirian Mexico was run by a coalition of bankers, industrialists, large landowners, and powerful politicians. The industrialists who were close to Díaz, for example, not only received protective import tariffs, they were also protected from domestic competition by regulatory and financial barriers to entry. Bankers were similarly protected: limits on chartering meant that there were rarely more than three banks competing in any market. Díaz also used his regulatory powers to transfer assets from groups that were weak and unorganized to individuals and groups who were politically well-connected. This meant that large, commercial farms expanded dramatically during the Porfiriato, at the expense of small farmers, who were made landless. Precisely because access to political power was a crucial part of business survival in Porfirian Mexico, powerful politicians were able to share in the rents created by Díaz's policies: state governors, members of congress, and federal cabinet ministers frequently sat on corporate boards and received stock and director's fees from the firms whose interests they protected.[1]

[1] For a detailed analysis of the Porfirian regime, see Stephen Haber, Armando Razo, and Noel Maurer, *The Politics of Property Rights: Political Instability, Predictable Commitments, and Economic Growth in Mexico, 1876-1929* (Cambridge: Cambridge University Press, 2003). Also see: Noel Maurer, *The Power and the Money: The Mexican Financial System, 1876-1932* (Stanford, CA: Stanford University Press, 2002); Stephen H. Haber, *Industry and Underdevelopment: The Industrialization of Mexico, 1890-1940* (Stanford, CA: Stanford University Press, 1989); Edward Beatty, *Institutions and Investment: The Political Basis of Industrialization in Mexico Before 1911* (Stanford, CA: Stanford University Press, 2001); Graciela

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The Revolution of 1910-20

The Díaz regime sowed the seeds of its own collapse.[2] The same policies that encouraged the growth of large scale commercial agriculture created a class of small farmers who became radicalized and clamored for the return of their lands. Similarly, the growth of mining, railroads, and manufacturing produced a working class that began to organize and strike. The army and the rural police often brutally repressed these strikes, but this only served to further fuel social discontent. Finally, the exclusive and selective nature of the Porfirian alliance with private economic interests gave rise to opposition to the Díaz regime from members of the elite who were outside the governing coalition. Foremost among these were the merchants, mine owners, and ranchers of Mexico's northern border states who resented the fact that political power, and its attendant economic benefits, was concentrated in the hands of a small, Mexico City-based elite.

This broadening opposition crystallized in the 1910 presidential candidacy of Francisco I. Madero, a scion of a wealthy northern family with interests in ranching, mining, and manufacturing. When Díaz claimed victory in an election tainted by intimidation and fraud, Madero's supporters took up arms. The forces loyal to Madero never decisively defeated the federal army, but their successes on the battlefield

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Márquez Colin, "The Political Economy of Mexican Protectionism, 1868-1911," Ph.D. diss., Harvard University (2002); Aurora Gómez Galvarriato, "The Impact of Revolution: Business and Labor in the Mexican Textile Industry, 1900-1930" (Ph.D. diss., Harvard University, 1999).

2 For discussions of the origins of the Mexican Revolution, see Alan Knight, *The Mexican Revolution*. 2 vols. (Cambridge: Cambridge University Press, 1986); Adolfo Gilly, *La revolución interrumpida* (Mexico City: Ediciones Era, 1994); John Mason Hart, *Revolutionary Mexico: The Coming and Process of the Mexican Revolution* (Berkeley: University of California Press, 1987); John Womack, Jr., *Zapata and the Mexican Revolution* (New York: Vintage Books, 1970); Friedrich Katz, *The Secret War in Mexico: Europe, the United States, and the Mexican Revolution* (Chicago, Ill.: University of Chicago Press, 1981).

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convinced an elderly and demoralized Díaz to negotiate an exit. In May 1911, he resigned as president and sailed to exile in France.

The departure of Porfirio Díaz opened a two-decade-long period of coups, rebellions, and civil wars. Madero lasted only a little over a year in power. His coalition dissolved as soon as the small farmers who had supported him began to demand that he make good on his promise to restore the lands that had been taken from them during the Porfiriato. He could not carry out a land reform, however, without igniting resistance from the country's landed elite. So, he reneged on his promise, which set off a series of revolts in various parts of the country. Madero therefore charged the army, composed of the same generals who had served Díaz, with putting down those movements. They turned on Madero instead, overthrowing and murdering him in 1913. The leader of that counter-revolution, General Victoriano Huerta, was then overthrown by the same broad coalition that had deposed Díaz. In 1914, Huerta resigned the presidency and went into exile.

The anti-Huerta forces were united only by their desire to drive him from power, and they quickly split into two camps that fought a vicious civil war between 1914 and 1919. The "Constitutionalist" forces were led by Venustiano Carranza, a major landowner and former Porfirian politician. Carranza espoused liberal democracy, but his military allies commanded troops who followed them principally on the basis of patronage and personal loyalty. To the extent that the Constitutionalists embraced any particular ideology, it was a commitment to nationalism—fueled by resentment over foreign investors' control of Mexico's mining and petroleum industries.

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The rival to the Constitutionalists consisted of a loose combination of small farmers, organized into the Southern Revolutionary Army and led by Emiliano Zapata, and miners and ranch workers organized into the Division of the North led by Francisco "Pancho" Villa. These movements did not share a common political or economic agenda. The demand of Zapata and his followers was socially and politically potent, but highly local: the return of lands taken from them by large farmers during the Porfiriato. Villa, in contrast, allowed pragmatic political and economic considerations to guide his views on issues such as agrarian reform, labor law, and the taxation of foreign investment. In point of fact, even though his rhetoric echoed that of Zapata, he distributed almost no land at all.

Carranza's armies eventually defeated Villa and Zapata, but only by forging alliances with groups that were committed to far-reaching social reforms, particularly industrial workers and small farmers. Some of the military commanders who fought under Carranza's banner embraced fairly progressive labor programs (including an eight-hour day and a minimum wage) in order to build their own local political organizations. Carranza even negotiated a pact with anarchist-inspired worker organizations mobilized into "Red Brigades." The Constitutionalists made similar alliances with radical peasants. Indeed, Carranza persuaded some of the agrarian groups allied with Zapata to switch sides by promising them land.

Precisely because Carranza had to ally himself with a wide variety of more radical groups, the 1916-1917 constitutional convention produced a document that was far more reformist than he initially envisioned. For example, Article 27 of the Constitution of 1917 altered property rights in land, water, and petroleum. Private ownership of these assets

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was no longer a right; rather, it was a privilege that the government could reallocate in the interest of the public good. This declaration of the public ownership of these natural resources became the basis for an extensive agrarian reform and the nationalization of the petroleum industry in 1938. Similarly, Article 123 greatly expanded governmental oversight of worker-employer relations. Most fundamentally, it guaranteed the rights to organize and strike. It also introduced an eight-hour workday and a six-day workweek, regulated the employment of women and children, established occupational health and safety standards, increased job security, mandated a legal minimum wage, overtime pay, maternity leave, and profit sharing.

Neither the signing of a new constitution, nor the defeat and assassinations of Zapata and Villa ended political violence. In 1920 Carranza, who had served as president since 1917, was overthrown and assassinated by his leading military commander, Álvaro Obregón. Obregón (who served as president from 1920-1924) and his hand-picked successor, Plutarco Elías Calles (who served 1924-1928), faced major revolts led by their own generals and cabinet members in 1923, 1927, and 1929. Moreover, from 1926 to 1929 the Calles government fought a civil war against lay elements of the Catholic Church, the Cristeros, who sought to overthrow Calles because of his anti-clerical policies.

In order to defeat these threats, Obregón and Calles recruited a diverse and unlikely set of allies. First, they sought to rally to their side Mexico's principal entrepreneurial groups. Obregón and Calles were compelled to do so because they needed a growing economy capable of generating the tax revenues required to, among other things, pay the army. As a consequence, they re-created the Porfirian system of crony

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capitalism. Porfirian-era industrialists dominated the federal commission that determined import tariffs, and Porfirian-era bankers wrote the new banking laws.[3]

Second, Obregón and Calles needed to muster farmers and workers into paramilitary units in order to face down rebellious army factions and the Cristeros. They therefore carried out selective land distributions designed to benefit small farmers and their warlord leaders who sided with the government at crucial moments. They also forged an alliance with the leading national labor organization, the Mexican Regional Labor Confederation (known by its Spanish acronym, CROM). The CROM not only offered the backing needed to win elections, it also provided armed units that could guard railways and other installations, thereby freeing up regular troops to fight various rebel groups. In exchange, the government sided with the CROM in its disputes with employers and rival labor organizations. Cementing this alliance was the appointment of the CROM's leader as Minister of Industry, Commerce, and Labor.

Third, Obregón and Calles gradually consolidated their control over the armed forces by permitting military zone commanders to amass large landholdings for themselves.[4] Obregón and Calles also participated in this land grab. Obregón became fabulously wealthy by cornering the chickpea market, Mexico's fastest growing agricultural export to the United States, while Calles and his family became major sugar growers and millers.

The Origins of the PRI

3 Haber, Razo, and Maurer, *The Politics of Property Rights*, chaps. 4 and 5.

[4] For an analysis of military pacification during the 1920s, see Edwin Lieuwin, *Mexican Militarism: The Political Rise and Fall of the Revolutionary Army* (Albuquerque: University of New Mexico Press, 1968).

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Obregón and Calles planned to continue governing Mexico even after both had served their constitutionally mandated, single four year terms in office. Calles therefore engineered the re-election of Obregón by convincing congress to amend the constitution to allow presidents a second, nonconsecutive term. He also lengthened the term in office to six years. Obregón then "won" the 1928 election by a landslide—the official tally recorded not a single vote for the opposition. The plan fell apart only when Obregón was assassinated the day after the election by a Catholic militant.

Calles responded to the challenge posed by Obregón's assassination in three ways. First, under pressure from the United States, he made peace with the Cristeros by agreeing not to enforce the most harshly anti-clerical provisions of the Constitution. This action not only contained the immediate threat posed by the Cristero rebels, but it also reduced the political risks arising from an army discontented with fighting against the insurgency. Second, Calles avoided a costly factional struggle over the 1928 presidential succession by removing himself as a potential candidate. Instead, he installed a series of puppet presidents between 1928 and 1934—an arrangement that allowed him to continue running the government without violating the constitutional prohibition against a president succeeding himself in office. Third, in 1929 he formed the National Revolutionary Party (the Partido Nacional Revolucionario, known by its Spanish acronym, PNR). The PNR was not a political party in the usual sense of the word. Rather, it was a forum in which conflicts among generals, warlords, and other powerful individuals could be brokered without violence.

The PNR largely succeeded in containing violent factional conflict, but it was too narrowly based to incorporate the organized popular movements that had emerged since

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1910. In 1934, Calles selected Lázaro Cárdenas as president, expecting him to be yet another puppet. Cárdenas, however, outmaneuvered Calles, eventually forcing him into exile. He also transformed the PNR into a mass party organized along corporatist lines. The renamed Party of the Mexican Revolution (PRM) was comprised of labor, peasant, "popular," and military sectors, although the military sector was eliminated in 1940. In 1946 the party changed its name once again to become the Institutional Revolutionary Party (PRI).

The Hegemony of the PRI

Until the late 1990s, the PRI held an effective monopoly on the exercise of political power. Indeed, the line between the party and the government blurred to the point that they were often viewed as one and the same. The blending of the party and the government gave rise, over time, to a cohesive political class that dominated Mexico's political life. Unlike the Porfiriato, members of this political class were not drawn from the country's business elite. Instead, they tended to be middle class in origin, and became part of the political elite through kinship ties or shared experiences in student or labor politics.[5] Despite factional competition and conflicts over specific policy goals, this class was united under a broad nationalist program. Its members also largely agreed upon certain norms of political action and economic goals, including regular rotation of personnel in elective and administrative offices and a sizable role for the public sector in the economy.

Mexico never became a single-party state. Opposition parties continued to exist on both the left and the right of the ideological spectrum. Nevertheless, by creating a

[5] For an analysis of Mexico's political elite, see Roderic A. Camp, *Mexico's Leaders: Their Education and Recruitment* (Tucson: University of Arizona Press, 1980).

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large and heterogeneous coalition, and by organizing Mexico's various corporate groups into formal organizations that were part of the party, the PRI occupied the broad center of national political life.

It would be easy to argue that the PRI maintained its hold on Mexican politics because government officials authorized or tolerated fraudulent electoral practices, or because they engaged in brute forms of political repression. There is no doubt that they often did so. Indeed, there is abundant evidence that the party stole the 1940 presidential election through violence and fraud. PRM supporters used deadly force to break up opposition rallies—there were thirty fatalities in Mexico City alone on election day—and routinely stole ballot boxes. The final vote count gave an implausible 94.6 percent to the "official" party's candidate, General Manuel Ávila Camacho.[6]

As Beatriz Magaloni has shown, however, the PRI did not just rely upon state coercive power. It employed a range of tactics that were designed to win elections by overwhelming margins, thereby signaling political entrepreneurs, both within the party and without, that resistance to the party was futile. They were better off staying within the PRI than going outside of it.[7]

One tactic that the PRI deployed in order to win election was its control of the mass media. This not only allowed it to dictate which facts were publicly available, it also allowed the party to influence the way those facts were framed, thereby structuring the way that the population thought about issues and envisioned alternatives to the policies and candidates on offer by the PRI. Until 1993, Mexico had only one private

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[6] Alan Knight, "The Rise and Fall of Cardenismo," in *Mexico Since Independence*, edited by Leslie Bethell (Cambridge University Press: 1991), pp. 300-1.

[7] Beatriz Magaloni, *Voting for Autocracy: The Politics of Party Hegemony and its Demise* (New York: Cambridge University Press, forthcoming).

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television network, Televisa, which was allowed to maintain a lucrative monopoly in exchange for which it tended to report on PRI candidates in a favorable light, while either ignoring the candidates of rival parties entirely or portraying them negatively. The PRI also controlled the content of newspapers. It accomplished this, in part, by bribing reporters and editors. In addition, it could cut off the supply of newsprint to publications that strayed too far from the government's approved line. It could do this because the government expropriated the country's only newsprint factory, and then set up a state run newsprint monopoly.[8]

The PRI as a Patronage Machine

Winning elections by overwhelming margins also required the distribution of patronage to two numerically important groups: small farmers and organized industrial workers. This not only required the distribution of palpable, if sometimes modest, benefits to rank and file members of those groups, it also involved giving the leaders of those groups opportunities for political mobility and personal enrichment.

The system of patronage that aligned Mexico's millions of small farmers with the PRI was rooted in the peculiar nature of Mexico's agrarian reform. Under pressure from agrarian radicals, Carranza had relented to Article 27 of the Constitution of 1917, which created a legal basis for a land reform. Neither Carranza, nor Obregón and Calles, actually followed through on the constitution: collectively they redistributed only four percent of Mexico's agricultural land, and much of what they did distribute fell under the control of powerful revolutionary generals or politicians—Obregón and Calles among

[8] Chappell H. Lawson, *Building the Fourth Estate: Democratization and the Rise of a Free Press in Mexico* (Berkeley: University of California Press, 2002).

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them. In 1930, Calles, who was now ruling through a puppet president, declared the agrarian reform a failure and called for an end to land redistribution.[9]

This situation changed radically under the presidency of Lázaro Cárdenas (1934-40), who sought to turn Calles' PNR into a mass party. Cárdenas redistributed 45.4 million acres—almost ten percent of Mexico's total land area, benefiting some 723,000 families—during his six-year term.[10] The land reform did not end with Cárdenas, but included an additional 78.1 million acres distributed between 1940 and 1970, making the Mexican agrarian reform one of the most far-reaching in all Latin America.[11]

What was peculiar about Mexico's land reform was that small farmers did not receive title to land. Instead, they were granted use rights to a set of parcels within an ejido—a communal form of ownership. Neither the ejido as a corporate entity, nor ejidatarios as individuals, could sell or rent their land. The inalienability of ejidal land meant that the kind of land grab that had taken place during the Porfiriato could not be repeated. This feature of the reform increased social stability in the countryside: twentieth century Mexico was not subject to the extremely violent and widespread conflicts over land that characterized other Latin American countries, such as El Salvador or Colombia.

The inalienability of ejidal land meant that neither the ejido as a corporate entity, nor ejidatorios as individuals, could obtain financing from private credit markets: their

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[9] Dana Markiewicz,*The Mexican Revolution and the Limits of Agrarian Reform, 1915-1946.* Boulder, Colo.: Lynne Rienner Publishers, 1993) pp. 55, 59.

[10] Horacio Mackinlay, "La política de reparto agrario en México (1917-1990) y las reformas al artículo 27 constitucional," pp. 117-67 in *Procesos rurales y urbanos en el México actual,* edited by Alejandra Massolo, et al. (Mexico City: Universidad Autónoma Metropolitana-Iztapalapa, 1991), Appendix 1.

[11] For a comparative examination of the dimensions and redistributive consequences of land reform in Bolivia, Cuba, Mexico, and Peru, see Susan Eckstein, "Revolution and Redistribution in Latin America," pp. 347-86 in *The Peruvian Experiment Reconsidered,* edited by Cynthia McClintock and Abraham F. Lowenthal (Princeton, NJ: Princeton University Press, 1982), esp. table 11.4.

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land could not serve as collateral. Ejidatarios were completely dependent on government development banks to finance the purchase of seeds, tools, and fertilizer. Ejidos as corporate entities had to rely on the government in order to finance large scale improvements, such as irrigation works and roads. Moreover, the property rights of the ejido were subject to government action: the government could expand the ejido, by granting it additional private lands, or it could reallocate ejido lands for other projects that were deemed socially necessary—such as the creation of Acapulco as a tourist destination in the 1940s.

The ejido was a very inefficient way to grow food. Precisely because ejidos were not private property, efficient ejidatarios could not expand their operations by purchasing neighboring parcels. Nor could unproductive ejidatarios easily leave the land without losing their entire investment. Private farmers, for their part, curtailed investment because they feared expropriation of their property.[12] Thus, although agricultural productivity in Mexico doubled between 1948 and 1970, the rate of growth was much slower than in the rest of Latin America. After 1970, Mexico's agricultural productivity stopped improving altogether, and the gap between Mexico and the rest of the hemisphere ballooned. By 1980 agricultural productivity in Mexico was less than half that of Chile, Colombia, and Venezuela, and less than a quarter that of Argentina.[13] Agricultural incomes in Mexico, therefore, lagged behind other Latin American countries. Indeed, the vast majority of ejidatorios were stunningly poor.

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[12] Yates, *Mexico's Agricultural Dilemma*, p. 175.

[13] Thorpe, Appendix Figure IV.3 and Appendix Table IV.1, pp. 327-29. **[need full citation] Take a look at the following book, Rosemary Thorpe, Progress Poverty, and Exclusion, and see if this is the source for this fn.**

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The ejido was, however, a very efficient way to mobilize votes for the PRI. All of the benefits that the government could bestow upon an ejido—credit for its members, agricultural extension, marketing of output, irrigation, schools, public health—could be withdrawn if ejidatarios failed to vote for the party. These arrangements, we hasten to point out, were not distant theoretical abstractions. Local political bosses, who headed ejidal organizations, made sure that ejidatarios voted the right way. These organizations, in turn, were members of the National Peasant Confederation (known by its Spanish acronym, CNC) which itself was a formal part of the PRI.

Controlling elections in cities was much more crucial, and much more difficult, than in the countryside. Urban society was socially heterogeneous and mobile: voters could not be controlled by local political bosses. Moreover, urban demonstrations or uprisings could not be easily isolated and repressed, as was the case in rural areas. They had the potential to propagate so quickly that the government would lose all control, and be forced out.

The PRI therefore needed to secure the loyalty of organized urban groups that would not only vote for the party in large numbers, but that could also be mobilized for PRI rallies and demonstrations, thereby signaling the rest of the population that protest against PRI rule was futile. Two urban groups that were already organized and whose incentives could be aligned with the PRI were public employees and industrial workers. In return for their loyalty, the PRI granted these two groups a host of benefits not available to other members of society.

Foremost among these benefits was job security. Mexican labor law made it extraordinarily difficult for employers to dismiss unionized workers. The law also

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safeguarded the jobs of unionized workers by making it difficult for the firms in which they worked to fail. As of 1931, labor contracts covered entire industries: all firms in that industry therefore paid the same wages and had the same work rules. As a result, incumbent firms could not be easily threatened by new entrants or by one another: all firms had the same labor costs. The jobs of unionized workers were further secured by protecting their employers from foreign competition: the government granted them high levels of trade protection, a subject that we will return to in detail.

Public employees and unionized workers also received social welfare programs that were not available to the rest of society, including retirement pensions, worker's compensation, and health care. Unionized workers were covered by the Mexican Social Security Institute (known by its Spanish acronym, IMSS). At its founding in 1944, IMSS covered only 355,000 employees in the formal sector. By 1950, the government had expanded coverage to 1.1 million workers, but this still amounted to only 16 percent of the country's labor force.[14] In 1950, the government supplemented IMSS with specialized social security plans for workers in the state-owned railroad and petroleum industries. In 1960, the government further extended social insurance coverage to all government employees. Their benefits (provided through the Social Security Institute for State Workers, known by its Spanish acronym ISSSTE) not only included pension plans and general health insurance, but also access to specialized hospitals and subsidized government-owned supermarkets.

The vast majority of the Mexican population—small farmers, ejidatarios, day laborers, urban service workers—were completely outside the system of social insurance.

[14] INEGI, *Estadísticas históricas de México*, 3rd ed. (Aguascalientes, Mexico: INEGI, 2000), table 4.3.

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As late as 1980, only 44 percent of the population lived in a family covered by any social insurance program. Only 22 percent of this group (10 percent of the total population) enjoyed coverage under the more expansive programs available to public employees.[15]

PRI administrations also engaged in housing programs designed to reward organized labor and public employees. In 1972, the government created the National Worker Housing Institute (known by its Spanish acronym, INFONAVIT), a federal agency that collected a 5 percent levy on most formal-sector workers' wages and used those revenues to make subsidized housing loans. By 1980, the federal government financed 80 percent of all formal-sector housing construction in Mexico, mostly through INFONAVIT. This program was aimed at urban formal-sector workers, and in practice many of its benefits were captured by the Confederation of Mexican Workers (CTM), the country's most politically influential labor organization and the PRI's official labor affiliate.[16]

Readers may wonder why the PRI did not provide universal access to social insurance. The short answer is that the PRI did not need to: it could dominate elections in the countryside by employing its meager ejidal credit and marketing programs as a form of patronage; and it could control elections in the cities by providing social welfare benefits to the two urban groups that were capable of collective action, public employees and unionized industrial workers.

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[15] Calculated from data in INEGI, *Estadísticas históricas de México*, tables 4.3 and 4.8.

[16] INEGI, *Estadísticas históricas de México*, table 3.3.

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The Paradox of Low Taxation

A longer answer is that even if the Mexican government had wanted to provide the entire population with social insurance and education, it lacked the fiscal capacity to do so. Until 1976, the revenues of the Mexican government were always less than 10 percent of GDP, and until 1979 they were always less than 15 percent. They finally topped 15 percent in the early 1980s, when revenues from oil exports skyrocketed.

How low Mexico's ratio of government revenues to GDP was can be see in Figure 2.1, which compares Mexican government revenues as a percentage of GDP against the average for the rest of Latin America and the average for the other member states of the Organization for Economic Cooperation and Development (OECD).[17] From 1950 to 1982, Mexico's ratio of government revenues to GDP was less than half that of the OECD average. One might argue that the comparison is unfair, because most members of the OECD are wealthy countries that can afford to invest in the administrative capacity to collect taxes. The problem with this argument is two-fold. First, Mexico had a much lower ratio of government revenues to GDP than other OECD countries at the same per capita income level as Mexico: on average, Mexican collections were only 61 percent that of Greece and 56 percent that of Portugal. Second, Mexico's ratio of government revenues to GDP were only 66 percent that of the rest of

[17] The data only include revenues collected by the central government. We therefore do not include countries in which there is substantial revenue collection at the state or provincial level. Hence, we drop the United States among the OECD countries, as well as Argentina and Brazil among the Latin American countries. We note that their deletion does not drive the result. Central government tax collection in the United States and Brazil exceeded that of Mexico, while that of Argentina was comparable to Mexico. Source: OECD and Latin American data, International Monetary Fund, International Finance Statistics, online edition; Mexico, Oxford Latin American database.

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Latin America. In point of fact, the Mexican government collected revenues at about the same ratio to GDP as the regions poorest countries, such as Guatemala and Honduras.

[Figure 2.1]

Government revenues in Mexico were low because of the lack of taxes on capital. Property taxes in Mexico were set at such low levels as to be virtually non-existent. Taxes on financial wealth were similarly low. It was easy for sole proprietorships, partnerships, and corporations to evade taxation by over-invoicing and transfer pricing. In theory, the government could have taxed capital when corporate profits were distributed to shareholders as dividends. As a practical matter, however, there was no way to do so: there was no centralized registration of stock ownership; dividends were simply "paid to the bearer."

The government was well aware of these features of its tax system. A distinguished group of economists, convened by the government in 1961 in order to advise it on how to increase revenues, noted them in its report, and advised the government to create a stock registry so that it could tax corporate dividends. Their recommendations were, however, ignored in the subsequent tax legislation. A stock registry was not created until 1985, and even then the Mexican government continued to rely overwhelmingly on regressive taxes on salaried income and consumption (excises and value added taxes).

Why would a government that professed to represent the interests of peasants and workers leave capital untaxed? We would suggest that the PRI's taxation policies were intentional: they were part of a broader set of strategies designed to coax capital into

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production and to cement an informal alliance between the country's business class and the party.

The Mexican government faced a dilemma: it needed a private sector in order to make the economy run; but the very same policies that it had put into place in order to align the incentives of peasants and workers with the PRI made the private sector view the government as a menace. Mexico's bankers had been expropriated by Carranza in 1916, in order to obtain the resources needed to defeat Villa and Carranza.[18] Industrialists had been forced by the government to cut the length of the workday, from 12 to eight hours, in the 1910s. In the 1920s they had been compelled by the government to submit to binding arbitration by labor boards on which the unions had representatives. A series of ad hoc agreements throughout the 1920s forced industrialists to increase wages, and then the 1931 labor code made it almost impossible to fire workers. Some industrialists had been threatened with expropriation when they tried to curtail operations during the Great Depression, while others, such as the country's largest paper mill, had been expropriated for purely political reasons.[19] Commercial farmers, of course, had been subject to expropriation ever since the revolution, and had seen much of their best lands taken during the Cárdenas presidency.

The Mexican government could not coax the business class to invest by promising not to reduce property rights in the future. No promise the government made was credible, because there was no way to sanction it: the PRI won every election; and PRI presidents and governors then appointed the country's judges.

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[18] Haber, Razo, and Maurer, *The Politics of Property Rights*, Chap. 4.

[19] Haber, Razo, and Maurer, *The Politics of Property Rights*, Chap. 5.

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The government's lack of credibility meant that it had to find ways to raise rates of return high enough to compensate investors for the risk of expropriation. One way that it did this was by not taxing capital. It did far more, however, than just maintain a low-tax environment. It also allowed private investors to write the rules governing their own activities, provided subsidized inputs to production, crafted regulatory barriers to entry that helped maintain oligopolies and monopolies, and protected them from foreign imports via tariffs and import permits.

These steps allowed the government to forge an alliance of convenience with Mexico's business class. This alliance, jokingly referred to by contemporaries as "the alliance for profits," a play-on-words on John F. Kennedy's alliance for progress, was not a theoretical abstraction. Mexico's business interests, while excluded from a formal role in the PRI, were closely linked to the state through a series of business chambers and exercised considerable influence in shaping public policies.[20]

The Politics of Trade Protection

The PRI built upon a long-standing tradition of protective tariffs that went back to the 1890s, but refined these by progressively embracing a system of import permits that

[20] These organizations included the Mexican Employers' Confederation (COPARMEX), the Confederation of National Chambers of Commerce (CONCANACO), the National Confederation of Chambers of Industry (CONCAMIN), and the National Chamber of Manufacturers (CANACINTRA).

The 1936 Law on Chambers of Industry and of Commerce established the main institutional context for business political action. Until its reform in 1996, it served as one of the pillars of Mexico's system of interest represenation and underpinned multiple agreements among government, labor, and the private sector. See, among other sources, Francisco Valdés Ugalde, "From Bank Nationalization to State Reform: Business and the New Political Order," pp. 219-42 in *The Politics of Economic Restructuring: State-Society Relations and Regime Change in Mexico*, edited by Maria Lorena Cook, Kevin J. Middlebrook, and Juan Molinar Horcasitas (La Jolla, CA: Center for U.S.-Mexican Studies, University of California, San Diego, 1994), and Matilde Luna, "Business and Politics in Mexico," pp. 332-52 in Kevin J. Middlebrook, ed., *Dilemmas of Political Change in Mexico* (London: Institute of Latin American Studies, University of London / Center for U.S.-Mexican Studies, University of California, San Diego, 2004). The panoply of major business organizations included groups not directly licensed by the state, including the highly influential Private Sector Coordinating Council (CCE) and the Mexican Council of Businessmen (CMHN).

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excluded foreign goods at any price. Until 1947, Mexico had protected domestic industry with a cascading tariff structure: the tariff on consumer goods was much higher than on imported raw materials and on imported machinery. The 1947 tariff act raised import tariffs slightly, pushing the rate on consumer goods to 50 percent, while keeping rates on raw materials and machinery at five percent and 10-15 percent respectively.[21]

The permit system did not just limit the quantity of imported goods, it helped restrict domestic competition as well, and in so doing made the government's commitment to job security for unionized industrial workers even more credible. Importers could not apply for a permit until the imported goods had already arrived in customs. During the weeks that it took to process the permit, the importer had to bear an inventory cost equal to eight to ten percent of the value of the goods, in addition to paying the posted duties. Most crucially, the application could be turned down by officials from the Ministry of Industry and Commerce, who operated with tremendous discretion. The result was that unless a firm was politically connected to begin with, it was unlikely to even begin the process. Access to import permits therefore served as a barrier to entry, limiting competition.[22]

Mexico's permit system created incentives for the government to continually expand the range of goods subject to quantitative restrictions. When it was created in 1947, the permit system only applied to "luxury goods." Within a year, however, manufacturers of other consumer products began to pressure the government to expand the range of restricted goods, and the government granted those requests. As those consumer goods

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[21] Clark W. Reynolds, *The Mexican Economy: Twentieth-Century Structure and Growth* (New Haven, Conn.: Yale University Press, 1970), p. 210.

[22] Reynolds, *The Mexican Economy*, pp. 221-22.

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industries expanded, they imported ever larger quantities of foreign-made capital and intermediate inputs. As imports of those inputs soared, the balance of trade went into deficit.[23]

The balance of trade problem could have been solved by increasing exports, but protectionism had a number of perverse consequences that frustrated attempts to promote export growth. First, Mexico's industrialists had weak incentives to pursue export markets: they were already earning enormous profits. It was not just that they did have to compete with imported goods. They also did not have to compete very hard against other domestic producers, because Mexican industry tended to be highly oligopolized.[24] In part, oligopolies were an outcome of a small market that could only support a limited number of firms using mechanized production technologies. In part, oligopolies were an outcome of Mexican labor law: new entrants could not out-compete industry incumbents on the basis of lower wages and more flexible work rules. The barriers to entry created by the permit system also played a role in encouraging market concentration. Finally, differential access to finance—particularly the ability of incumbents to obtain financing from government-run development banks, a subject that we will return to shortly—played a role in restricting new entry.

Second, protectionism produced incentives for the government to increase export taxes, which put Mexican primary products at a competitive disadvantage in world

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[23] Alan Manne, "Key Sectors of the Mexican Economy, 1962-72," in *The Theory and Design of Economic Development*, edited by Irma Adelman and Erik Thorbecke (Baltimore, Md.: Johns Hopkins University Press, 1966).

[24] Victor Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 283; Enrique Hernández Laos, *La productividad y el desarrollo industrial de México* (Mexico: Fundo de Cultura Económica, 1985), p. 397.

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markets. The whole point of protectionism was to raise the cost of imported goods to the point that the population chose not to purchase them. Once that happened tax revenues from import tariffs collapsed. (See Figure 2.2). The government therefore needed to find an alternative source of tax revenues. As we have already discussed, it chose not to increase taxes on income and wealth. It therefore compensated for the decline in import taxes by increasing taxes on exports, which doubled between 1940 and 1960.[25]

Finally, the government sought to promote industrial investment by maintaining an overvalued exchange rate, which made imported capital goods appear inexpensive. Between 1954 and 1976 the Mexican government maintained a fixed exchange rate. Over the same period, however, the price level in Mexico rose by a factor of 3.1, while the price level in its major trading partner, the United States, rose by a factor of only 2.1.[26] The appreciation of the peso meant that Mexican exports appeared very expensive in dollar terms.

[Figure 2.2]

Solving the balance of trade problem by increasing exports was thus not easily accomplished. In fact, as figure 2.3 demonstrates, the percentage of Mexican GDP that was composed of exports fell monotonically from the 1950s to the early 1970s, at which point the government abandoned its export-promotion programs, with the exception of the in-bond (maquiladora) manufacturing program along the Mexico-U.S. border.[27] The only success that Mexico had in increasing exports, and it was a success that came quite

[25] Reynolds, *The Mexican Economy*, pp. 217-18.

[26] Clark W. Reynolds, "Porqué el desarrollo estabilizador de México fue en realidad desestabilizador," *El Trimestre Económico* 44, no. 4 (1977): 1014.

[27] Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 328.

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by accident, occurred in the late 1970s, when it was able to take advantage of high oil prices and new discoveries in the Gulf of Mexico. Even that success, however, was a pyrrhic victory: the jump in oil exports was eaten up by the need to import specialized drilling and pumping equipment to bring that oil to market. The balance of trade remained in deficit.[28]

[Figure 2.3]

Mexico could have lived with a trade account that was perpetually in deficit by running a positive balance on the capital account. However, that would have required Mexico to be open to foreign direct investment (FDI). As we shall discuss in detail below, there were strong political pressures on the government to do precisely the opposite. As a result, it severely limited the ability of foreign firms to do business in Mexico.

Unable to increase exports, and unable to run a surplus on the capital account, the Mexican government chose to close the trade imbalance by expanding the system of protection. If imports of capital and intermediate goods, a consequence of the growth of consumer goods industries, were causing a trade imbalance, why not use the permit system to encourage the growth of those industries in Mexico? The proportion of imports covered by the permit system grew from 28 percent in 1956, to 65 percent in 1965, and to 74 percent in 1974.[29] The expanded permit system was remarkably effective in reducing

[28] These are the authors' calculations based upon data in Cárdenas, "The Process of Accelerated Industrialization," tables A-4 and A-8-a. Mexico began to expand its petroleum production in 1973, but it was still a net importer of oil until 1977. See Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 324.

[29] Wallace et al., *La política de protección*, p. 94; Enrique Cárdenas, "The Process of Accelerated Industrialization in Mexico, 1929-1982," in *Industrialization and the State in Latin America: The Postwar Years*, vol. 3 of *An Economic History of Twentieth-Century Latin America*, edited by Enrique Cárdenas, José Antonio Ocampo, and Rosemary Thorp (London: Palgrave, 2000), p. 187.

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imports of intermediate and capital goods, whether measured as a percentage of all imports, of gross domestic product (GDP), or of total manufacturing production before the 1973 oil boom (see Figure 2.4). Imports of intermediate goods as a proportion of total Mexican production of intermediate goods dropped from 24.5 percent in 1950 to 17.3 percent in 1960 and 10.6 percent in 1969. Imports of capital goods as a share of domestic capital goods production fell from 55.1 percent in 1950 to 44.3 percent in 1960 and 29.3 percent in 1969.[30]

[Figure 2.4]

Foreign Direct Investment and "Mexicanization"

The response of foreign firms to Mexico's restrictive trade policies was to seek the benefits of protection for themselves by establishing local production facilities. This shift began in the 1920s with the arrival in Mexico of the Ford Motor Company, Palmolive, and several other multinational corporations (MNCs). By the 1950s the process was in full swing. Virtually all of the growth in U.S. foreign direct investment (FDI) in Mexico between 1950 and 1959 occurred in the manufacturing sector, so that by 1959 some 47 percent of all U.S. direct investment in Mexico was in manufacturing. As a result, in 1959 U.S. investors held claims on eight percent of total Mexican manufacturing investment.[31]

Multinational corporations were not constituents of the PRI, but the domestically-owned manufacturers who competed against them were. Thus, it was not long before the

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[30] Douglas H. Graham, "Mexican and Brazilian Economic Development: Legacies, Patterns, and Performance," in *Brazil and Mexico: Patterns in Late Development*, edited by Sylvia Ann Hewlett and Richard S. Weinert (Philadelphia, PA: Institute for the Study of Human Issues, 1982), pp. 23, 25.

[31] Reynolds, *The Mexican Economy*, pp. 190-91.

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national private sector brought to bear political pressures to regulate and limit foreign direct investment. These pressures grew significantly during the 1960s as the takeover of existing Mexican firms emerged as a principal MNC expansion strategy.[32] The fact that demands to regulate FDI tapped into powerful nationalist sentiments in Mexican society, which were themselves reflected in PRI rhetoric, made them particularly compelling in political terms.

As early as 1944, the administration of President Manuel Ávila Camacho (1940-1946) adopted a law requiring that all companies operating in Mexico be majority-owned by Mexicans. The law was never fully enforced, but it constituted a lever that the government could use whenever it sought to extract concessions from foreign firms operating in "strategic" industries.[33] For example, in 1958 President Adolfo López Mateos (1958-1964) declared that the production of basic petrochemicals was strategic and compelled foreign producers to sell their operations to the state-owned Mexican Petroleum Company (PEMEX). The following year, López Mateos decreed that the maximum level of foreign participation in the production of secondary petrochemicals should not exceed 40 percent.[34] In 1962 López Mateos moved to limit foreign ownership in the automobile parts industry to 40 percent.[35]

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[32] See Van R. Whiting, Jr., *The Political Economy of Foreign Direct Investment in Mexico: Nationalism, Liberalism, and Constraints on Choice* (Baltimore, MD: Johns Hopkins University Press, 1992), chap. 4.

[33] Peter Evans and Gary Gereffi, "Foreign Investment and Dependent Development: Comparing Brazil and Mexico," in *Brazil and Mexico: Patterns in Late Development*, edited by Sylvia Ann Hewlett and Richard S. Weinert (Philadelphia, PA: Institute for the Study of Human Issues, 1982), p. 143.

[34] Evans and Gereffi, "Foreign Investment and Dependent Development," p. 133.

[35] Rafael Izquierdo, *Política hacendaria del desarrollo estabilizador, 1958-1970* (México: Fondo de Cultura Económica, 1995), p. 117.

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The campaign to Mexicanize the economy was broadened in the 1960s and 1970s. In 1961 the government decreed that foreign mining companies had to sell majority stakes to Mexican investors.[36] In 1966 President Gustavo Díaz Ordaz (1964-70) ordered that the banking industry had to be domestically owned.[37] In 1967, he limited foreign ownership in the sulfur industry to 34 percent.[38] Three years later he declared his intention to Mexicanize the steel, cement, glass, fertilizer, paper, and aluminum industries.[39]

In 1973, the ad hoc nature of the Mexicanization campaign—in which foreign ownership limits were set on an industry by industry basis—was transformed into a blanket policy by President Luis Echeverría (1970-1976). New foreign investments had to be 51 percent Mexican owned and under Mexican control unless there were already more restrictive foreign ownership limits established for that industry.[40] A parallel measure restricted foreign firms' use of patents and trademarks. Echeverría also tried to promote Mexicanization by taxing foreign enterprises. His administration lowered depreciation allowances, limited the deductibility of advertising expenses, and increased the gross mercantile revenue tax, so that by 1972 foreign companies faced tax obligations equal to 46 percent of gross revenues.[41]

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[36] Marvin Bernstein, *The Mexican Mining Industry, 1890-1950: A Study of the Interaction of Politics, Economics, and Technology* (Albany, NY: State University of New York Press, 1964).

[37] Izquierdo, *Política hacendaria del desarrollo estabilizador, 1958-1970*, p. 119.

[38] Izquierdo, *Política hacendaria del desarrollo estabilizador, 1958-1970*, p. 119.

[39] Izquierdo, *Política hacendaria del desarrollo estabilizador, 1958-1970*, p. 112.

[40] Evans and Gereffi, "Foreign Investment and Dependent Development," p. 144. See also Whiting, *The Political Economy of Foreign Investment in Mexico*, chap. 4.

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How much did these policies affect the growth of foreign direct investment in Mexico? Foreign investors had a number of weapons that they could deploy in order to protect themselves from Mexico's new laws. Tax increases could be mitigated by over-invoicing and transfer pricing. Limits on foreign ownership could be mitigated by recruiting "zombie" Mexican partners, who nominally owned 51 percent of the stock but exercised no actual control. Alternatively, MNCs could create elaborate ownership arrangements involving multiple holding companies. Nevertheless, the evidence suggests that the Mexicanization drive took its toll on FDI: as Figure 2.5 shows, the rate of growth in the stock of FDI began a monotonic decline in the late 1960s. By the mid-1970s, the rate of growth of FDI in the manufacturing sector had become negative. Foreigners had begun to liquidate their investments in Mexican manufacturing.

[Figure 2.5]

Banking and Finance

There was also an alliance of convenience forged between the PRI and Mexico's bankers. This alliance was always much more tenuous than the one that had been forged with manufacturers. The alliance between the government and manufacturers was cemented by organized industrial workers, who aligned the incentives of the government with the incentives of industrialists: If the government withdrew trade protection, undermining the security of their jobs, the PRI would lose the crucial political support those workers provided. No such mechanism existed, however, to cement the alliance between the government and the bankers. When the government was desperate for funds there was little to keep it from preying upon the banking system. As we shall soon see,

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[41] Evans and Gereffi, "Foreign Investment and Dependent Development," p. 151.

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when the government began to run up against budget constraints in the mid-1970s, one of its first steps was to undermine the private banking system

The alliance between the government and the bankers went back to the mid-1920s. There had been a robust private banking system during the Porfiriato. During the Mexican Revolution, various factions, including the victorious Constitutionalists, preyed upon the banks in order to finance their military campaigns. When the revolution was over, there was virtually no banking system to speak of. The lack of a functioning financial system, however, jeopardized the survival of the Obregón and Calles governments, which needed sources of revenue beyond those they could obtain from taxation. Moreover, other important economic actors who Obregón and Calles viewed as politically crucial, most particularly manufacturers, clamored for the creation of a banking system that they could use to finance their operations.[42]

The problem was that bankers viewed the government as a non-credible partner. There was nothing to keep the government from expropriating the banks again. The bankers knew that the government did not have to engage in a de jure confiscation of assets in order to expropriate them, it had a series of tools at its disposal to carry out a de facto expropriation, including loan defaults, tax increases, inflationary monetary policies coupled to interest rate ceilings, negative real interest rates on required reserves, and directed credit programs that forced banks to lend to politically favored firms.

The government therefore had to work with the bankers in order to craft a series of institutions designed to raise the rate of return on banking high enough to compensate

[42] Stephen Haber, Armando Razo, and Noel Maurer, *The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876-1929* (Cambridge University Press, 2003), chap. 4.

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the bankers for the risk of expropriation. These institutions were laid down in 1925 at a convention that the government called with the country's private bankers. The banking law that came out of this convention was essentially written by the bankers themselves. Not surprisingly, the law they created severely limited competition by keeping foreign banks out of retail banking and by giving the National Banking Commission, on which they had representation, the right to regulate the number of charters granted to new banks. The law also created a government-owned commercial bank, the Banco de México, which lent most of its funds to private bankers and powerful politicians.[43]

As soon as the government began to consolidate its power, it began to take back some of the policy making authority it had delegated to the private bankers. In 1932, the government converted the Banco de México into a central bank. A further reform in 1936 required commercial banks to maintain cash reserves in the Banco de México, which is to say that banks had to lend part of their deposit base to the government. That same law also moved many bank supervisory functions from the National Banking Commission, on which private bankers had strong representation, to the Banco de México. A further set of reforms occurred in 1941, when the government forced commercial banks to divest their investment banking operations into separate corporations.[44]

Mexico's bankers did not roll over and play dead when the government began to shape banking policies to its own ends. They had considerable influence in the Banco de

[43] Noel Maurer, *The Power and the Money: The Mexican Financial System 1884-1932* (Stanford: Stanford University Press, 2002).

[44] Gustavo Del Angel-Mobarak, "Paradoxes of Financial Development" (Ph.D. Dissertation, Stanford University, 2002).

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México and the Treasury. Prominent bankers moved back and forth between the private sector and the government, often serving as Directors of the Banco de México or in high positions in the finance ministry. In point of fact, the annual meeting of the Banker's Association was always opened by the finance minister, the director of the central bank, and sometimes by Mexico's president. The social organ of the banker's association, the Banker's Club, actually had its offices inside one of the buildings of the Banco de México.[45]

The private bankers were able to use their influence to their own ends. As a legal matter, Mexico possessed at least three different types of banks from 1941 to 1982. There were commercial banks, which handled most retail banking operations as well as made short-term loans to business enterprises. There were investment banks (financieras), which made long term loans to businesses, as well as held equity positions in those firms. Finally, there were government-run development banks, the first of which had been founded in the 1930s, which make long term loans to business enterprises, collateralized by shares in those firms. As Figure 2.6 demonstrates, as early as the 1940s, the development banks were as an important a source of credit as the commercial banks, with other private financial entities (of which investment banks were the most important) accounting for but a small fraction of total credit. By the 1950s, the commercial banks began to stagnate, with other private banks and development banks providing progressively larger amounts of credit. By the early 1970s, the investment banks were the most important source of credit, followed by development banks, with commercial banks a distant third.

[45] Gustavo Del Angel-Mobarak, "Paradoxes of Financial Development" (Ph.D. Dissertation, Stanford University, 2002).

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[Figure 2.6]

Regardless of who owned them, all three types of banks worked together to finance Mexico's largest industrial and commercial enterprises. Indeed, as Del Angel Mobarak (2002) has shown, Mexico's industrial conglomerates typically owned both a commercial bank and an investment bank, and the portfolios of these banks tended to be composed of shares held in the enterprises that were part of the conglomerates. The commercial and investment banks were, in essence, the treasury divisions of the conglomerates: they had little relationship to the impersonal credit intermediaries of economic theory. As a result, in 1974, the Mexican government gave up the legal fiction that the commercial and investment banks were independent of one another, and allowed them to merge into enterprises that were called multi-banks.

The theoretical justification for the government-owned development banks was that they existed in order to make up for an inadequate private banking system. These banks did not, however, compete with the privately owned banking system. In fact, they served as a mechanism to subsidize the private banks and the industrial conglomerates that were associated with them.

One of the functions of the development banks was to serve as second tier lenders, repurchasing loans made by commercial banks through special programs designed to channel credit to sectors the government deemed crucial. The credit law of 1941 actually required private banks to allocate 60 percent of their loans to such directed credit programs.[46] These directed credit programs represented a guarantee by the government to the private banks: all of the default risk was born by the development bank, but the private bank earned income from originating and servicing the loan.

[46] Del Angel Mobarak 2002

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Moreover, many of the firms that received these loans were not small and mid-sized enterprises. They were large manufacturers and commercial enterprises, with unionized workforces, that had the political clout to get designated as a strategic industry. This meant that industrial and commercial conglomerates could fund risky enterprises through the development banks, rather than from the private banks that were under their control. The group that bore the downside risk were not depositors and shareholders in the private banks, but were the taxpayers who subsidized the development banks.

Development banks also made direct loans to private manufacturers, further subsidizing large industrial firms as well as the private banks that owned them. The largest and oldest development bank in Mexico, Nacional Financiera (known by its Spanish acronym, NAFIN) obtained its capital by selling government-backed bonds and then made long-term loans to manufacturers that were collateralized by blocks of shares issued by those firms. NAFIN was supposed to provide credit to small and mid-sized manufacturers, who tended to be unable to obtain financing from the commercial and investment banks. As a practical matter, however, NAFIN tended to allocate most of its credit to the very same industrial conglomerates that received financing from private banks. The political pressure to lend to large firms, which tended to have large, unionized, and politically influential labor forces, simply outweighed whatever original mandate NAFIN may have had.[47]

NAFIN typically took a minority shareholder position in companies to which it extended credit. If the firm performed well, NAFIN's stake would, over time, become purely nominal. But if a firm performed poorly, then NAFIN would typically lend

[47] Cárdenas, "The Process of Accelerated Industrialization," p. 190.

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additional funds and enlarge its equity stake. Many of these enterprises were large employers, whose unionized workforces were politically crucial to the PRI. This meant that the government came to use NAFIN as a mechanism to bail out manufacturers that were not economically viable. Worse, the policy of bailouts encouraged moral hazard: knowing that they would be bailed out, manufacturers undertook enterprises of doubtful profitability. As a result, by the early 1980s the government owned 1,155 enterprises—many of which were perennial money-losers—including sugar refiners, steel mills, airlines, and hotels.[48]

This set of arrangements between the government and the private banks produced a large and rapidly growing banking system. As Figure 2.7 demonstrates, the amount of private credit in Mexico grew from 16 percent of GDP in 1950 to 34 percent in 1971. This meant that the ratio of private credit to GDP in Mexico was about twice the average for Latin America. It also meant that from 1950 to the early 1970s, the rate of growth of private credit in Mexico was faster than that in the OECD countries.

[Figure 2.7]

Taking Stock

The arrangements between the government and Mexico's private bankers would soon be undermined. It would end in a hyper-inflation, a foreign debt crisis, the expropriation of the banks, and an economic collapse that would, in time, erode the PRI's monopoly on power. Before we turn to the collapse of this system, however, we should stop and take stock of its accomplishments.

[48] Valdés Ugalde, "From Bank Nationalization to State Reform," table 9.2; Cardenas 2000: 195.

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The alliance of convenience between the PRI and the private sector was successful at coaxing capital into production. Trade protection, domestic barriers to entry, the creation of bank-centered industrial conglomerates, and subsidized government credit all had the effect that one would predict from theory: national industry grew dramatically. From 1940 to 1980 the volume of output of manufacturing industry grew at more than ten percent per year.[49] By 1980, there was virtually no consumer good that was not domestically produced in Mexico, including consumer durables such as automobiles and household appliances. Mexican manufacturers also produced a broad range of intermediate goods, such as steel and petrochemicals. They had even moved into the production of a number of products whose engineering or scientific requirements make them difficult to manufacture, such as pharmaceuticals, seamless steel pipes, and special-application glassware.

One outcome of the rapid expansion of industry was that labor productivity in the aggregate grew by 165 percent over the three decades from 1950 to 1980 (see Figure 2.8). The increase in productivity was the result of two factors: workers moved from low productivity agriculture to higher productivity manufacturing; and workers in manufacturing had progressively larger amounts of capital to work with. The residual gains in productivity, the share that cannot be accounted for increases in capital or shifts in the labor force, were quite trivial.[50]

Whether Mexico's productivity growth from 1950 to 1980 was fast or slow depends on what it is compared to. Compared to the rest of Latin America, Mexico's

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[49] INEGI, 1994, p. 609.

[50] Reynolds, *The Mexican Economy*, p. 166; Also cite Reynolds, Shift Share Analysis. Get full cite.

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productivity performance was admirable. As Figure 2.8 demonstrates, there was a sizable productivity gap between Mexico and the rest of Latin America in 1950, and that gap widened over the course of the next three decades. The problem with using the rest of Latin America as the standard of comparison is that all of the other countries in the region embraced the same distortionary policies that Mexico did, protective tariffs and import permits, financial repression and directed credit, limits on foreign direct investment, and overvalued exchange rates. Some even went further, creating multiple exchange rates, government-run marketing boards, and restrictions on profit repatriation by foreign owned companies. Comparing Mexico to these countries therefore tells us nothing about whether Mexico's policies helped or hindered productivity growth.

We therefore add a line of data in Figure 2.8 for average real output per worker in the rest of the OECD. By this metric Mexico's economic miracle does not look particularly miraculous. There was a sizable productivity gap, on the order of 30 percent, between the OECD average and Mexico in the 1950s. The ratio of Mexican to OECD productivity levels then held fairly constant through the 1960s and most of the 1970s. The only break in the relationship occurred in the years from 1978 to 1982, when Mexican productivity grew faster than that of the OECD because of the (very short run) impact of oil revenues and massive foreign borrowing.

Some readers might object to this comparison, arguing that the OECD includes a number of wealthy countries, such as the United States, Great Britain, and France, which were different from Mexico on so many dimensions that comparisons among them do not have analytic meaning. Such a reader might argue that a more appropriate metric would be to compare Mexico against members of the OECD that had similar levels of GDP per

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worker in 1950, and that, broadly speaking, were similar to Mexico in terms of the structure of their economies and their underlying political and social institutions.

We carry out that experiment in Figure 2.9, where we compare productivity per worker in Mexico against that of Spain, Greece, and Portugal—all of which resembled Mexico in the 1950s in that they had authoritarian governments, agrarian economies, and low levels of educational attainment and human capital formation. In point of fact, all three were substantially poorer than Mexico in 1950. In the 1950s, Spain's average output per worker hovered stubbornly at around 90 percent of the Mexican level. Within two years of Francisco Franco's decision in 1960 to liberalize trade, Spain opened up a sizable lead on Mexico. That gap then grew over the next two decades: Spain's average productivity advantage over Mexico was 19 percent in the 1960s and 47 percent in the 1970s. The data on Greece tell a similar story. In the 1950s, Greek output per worker was only 75 percent that of Mexico. Greek productivity levels then closed on those of Mexico in the 1960s, and overtook Mexico (by 30 percent) in the 1970s. Even Portugal, which remained protectionist until 1974, when long-time dictator Antonio Salazar was finally overthrown, grew faster than Mexico. In the 1950s, average output per worker in Portugal was 63 percent that in Mexico. By the 1960s, the average productivity gap had shrunk to 74 percent, and by the 1970s, Portuguese GDP per worker averaged 89 percent that of Mexico.

A balanced assessment of the evidence therefore suggests that Mexico's distortionary policies encouraged the country to industrialize. As a result, productivity grew, raising living standards. These were not trivial accomplishments. They did not,

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however, constitute an economic miracle. When all was said and done, Mexico remained a poor country.

[Figures 2.8 and 2.9]

The Beginning of the End: Deficits, Inflation, Expropriation, and the Debt Crisis

Mexico's political and economic system had a fundamental weakness: it was simultaneously based on a regime of low taxation, but it inevitably required higher levels of government spending. In order to coax capital into production, the government had taken the taxation of capital off the table. At the same time, however, industrialization produced a growing population of unionized manufacturing workers who required social welfare benefits. It also produced rapid urbanization, which required public investments in urban infrastructure such as subways, sewerage, water works, and roads. Finally, the government's credit policies, designed to hasten industrialization, generated the need for continual subsidies for the 1,155 money-losing enterprises that it came to own.

The lack of balance between the government's spending requirements and its taxation policies only became obvious over time. In the 1950s, the Mexican government had run balanced budgets: the fiscal deficit was typically on the order of 0.1 percent of GDP. In the 1960s, it began to deficit spend. Thus, in 1961 it sought expert advice about how to increase taxes, but then chose to ignore that committee's recommendation for the taxation of corporate dividends. As a consequence, deficits began to escalate, averaging 1.9 percent of GDP across the decade. By the 1970s, the fiscal deficit had grown out of control, averaging 6.6 percent of GDP.

Unwilling to bear the political costs of raising taxes or cutting expenditures, the government followed three strategies in order to finance its deficit. The first was to

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expand the money supply. This had the predictable effect of setting off inflation. As Figure 2.10 indicates, the average rate of inflation in Mexico accelerated from 2.7 percent per year in the 1960s to 16.8 percent during the 1970s. By 1981, the inflation rate had hit 27.9 percent.

[Figure 2.10]

The government's second strategy to fund the deficit was to force private banks to lend it their deposit bases by having the central bank increase bank deposit-reserve rate. These reserves were held in government bonds and paid below-market interest rates.[51] The result of this strategy can be seen in Figure 2.11. Reserve rates had trended downward through the 1950s and 1960s, hitting 11 percent of assets in 1971. The following year they began to grow substantially, hitting 33 percent by 1975 and 43 percent by 1978, where they leveled off until the bank nationalization of 1982. Inasmuch as a large portion of their deposits were being held by the central bank, earning below market interest rates, the banks responded by paying negative real rates of interest on deposits. This drove deposits out of the system: the ratio of bank deposits to GDP declined by more than 40 percent in the late 1970s.

The combined effect of falling deposits and increased lending to the government (through increases in reserves) had a predictable effect: the supply of bank credit for private purposes declined dramatically. The total claims on the banking system (including the development banks and the private banks) amounted to 34 percent of GDP in 1971. By 1977, that ratio had fallen by half, to only 17 percent, where it leveled off before falling again in 1982 when the government expropriated the banks—a subject that

[51] Izquierdo, *Política hacendaria del desarrollo estabilizador, 1958-1970*, p. 95.

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we will return to momentarily. Mexico's level of financial development was now not only low compared to the rest of the OECD, it was low by the standards of the rest of Latin America.

[Figure 2.11]

The government's third strategy was to borrow money from abroad. Fortunately for the Mexican government, at the same time that its demand for foreign loans was increasing, the supply of capital in foreign banks was growing. The sharp rise in prices induced by the Organization of Petroleum Exporting Countries (OPEC) induced after 1973 transferred financial resources from petroleum-importing nations to the exporting countries of the Persian Gulf. These countries sought investment returns on their new-found wealth and so deposited a sizeable proportion of their oil receipts in the European affiliates of U.S. banks. The banks, in turn, needed to find a profitable outlet for these funds.[52] In short, U.S. banks had a large supply of available funds, while Mexico had a high demand for U.S. dollar-denominated foreign bank loans.[53]

From the point of view of the banks, Mexico look like a particularly good candidate for foreign loans. In the early 1970s the state-owned Mexican Petroleum

[52] Rosemary Thorp, *Progress, Poverty, and Exclusion: An Economic History of Latin America in the Twentieth Century*, (Washington D.C.: Inter-American Development Bank, 1998), p. 207.

[53] For a contemporaneous assessment of the various "supply" and "demand" factors leading Mexico and other Latin America countries to borrow heavily from foreign commercial banks during the 1970s, see Carlos Massad, "External Financing in Latin America: Developments, Problems, and Options," in Kevin J. Middlebrook and Carlos Rico, eds., *The United States and Latin America in the 1980s: Contending Perspectives on a Decade of Crisis* (Pittsburgh: University of Pittsburgh Press, 1986), pp. 169-99; and Richard O'Brien, "External Debt and Capital Flows in Latin America," in Kevin J. Middlebrook and Carlos Rico, eds., *The United States and Latin America in the 1980s: Contending Perspectives on a Decade of Crisis* (Pittsburgh: University of Pittsburgh Press, 1986), pp. 201-29.

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Company (PEMEX) discovered large oil and natural gas deposits in the states of Campeche, Chiapas, and Tabasco, and needed investment capital in order to develop them. As Figure 2.12 demonstrates, Mexican petroleum output skyrocketed. Foreign bankers assumed, therefore, that Mexico would easily be able to repay its loans from the future stream of oil revenues that those loans would help finance.[54]

[Figure 2.12]

From the point of view of the Mexican government, low real interest rates during the 1970s made borrowing from U.S. private banks attractive. The inflation-adjusted interest rate on U.S.-dollar commercial bank loans to Latin American countries averaged only 0.3 percent during the 1974-1978 period, and actually turned negative in 1979 as inflation in the United States spiraled upwards.[55] As a result, Mexico borrowed massively. A substantial proportion of Mexico's borrowings were used to finance the expansion of the petroleum industry. Between 1974 and 1981, some 45 percent of Mexico's foreign borrowing went to PEMEX, which used the money to construct and operate offshore drilling platforms, build onshore processing facilities, enlarge its refineries, engage in further exploration, and purchase capital goods and technical expertise from abroad.[56] The rest of the borrowed monies were used to cover the Mexican government's expanding budget deficit.

Neither side monitored the amount that Mexico was borrowing very closely. The formation of international banking syndicates and the introduction of variable interest

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[54] Lorenzo Meyer and Isidro Morales, *Petróleo y nación: La política petrolera en México (1900-1987)* (México, D.F.: Fondo de Cultura Económica), p. 174.

[55] Morgan Guaranty Trust Company, *World Financial Markets*, various issues.

[56] Meyer and Morales, *Petróleo y nación*, chap. 7.

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rates in international commercial lending reduced the risks U.S. banks faced when making loans to Mexico (and other Latin American countries) in the 1970s. Syndication meant that the risk from foreign loans was spread over various banks, reducing the incentive for any particular bank to monitor precisely how the Mexican government and its agencies were using their credit. Variable interest rates protected banks from increases in the U.S. rate of inflation.[57] Remarkable as it sounds, the Mexican government did not monitor exactly how much was being borrowed, or on what terms, either: there was neither centralized institutional control over borrowing, nor any way to easily gather the relevant information about the size of the country's growing debt. State-owned companies and government agencies borrowed with few restrictions and little knowledge of the overall condition of the country's finances.[58]

The borrowing strategy of the Mexican government, and the lending strategy of the foreign banks, were gambles on high oil prices, more oil discoveries, and low interest rates. All of these factors, however, moved against Mexico. In 1981, international petroleum prices fell by ten percent. Although this was only a minor drop in the context of the price run-up that had occurred between 1973 and 1981, the decline caused foreign investors to begin to doubt optimistic projections that Mexico's oil revenues—and with them the country's capacity to sustain its borrowing on international capital markets—would continue to rise indefinitely. At the same time, PEMEX stopped finding new petroleum reserves (see Figure 2.12), a development that led analysts to wonder whether, if oil prices fell further, Mexico would be able to earn the hard currency revenues

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[57] Victor Bulmer-Thomas, *The Economic History of Latin America Since Independence* (New York: Cambridge University Press, 1994), p. 361.

[58] Thorp, *Progress, Poverty, and Exclusion*, p. 207.

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required to repay its U.S. dollar-denominated loans. Finally, the U.S. Federal Reserve Board began to raise interest rates in an attempt to curb domestic inflation. Because Mexico's dollar-denominated commercial bank loans were made at variable interest rates, rising interest rates substantially increased the burden of its foreign debt.

Mexico entered a debt spiral. In order to meet rising interest payments on the country's long-term foreign debt, the government resorted to short-term borrowing. From 1980 to 1981 Mexico's short-term debt rose from U.S.$1.5 billion to $10.8 billion.[59]

Throughout 1982 Mexico made a heroic attempt to avoid default, but these efforts ultimately proved counterproductive. The first line of defense was the government's decision to devalue the peso on February 18, 1982, which cut the exchange rate from 26.9 pesos per U.S. dollar to 47 pesos per dollar. This move was intended to curtail the flight of dollars out of Mexico. Unfortunately, the devaluation also meant that Mexico's gross domestic product (GDP), measured in U.S. dollars, dropped 42 percent on the day of the devaluation. But the dollar value of its debts remained unchanged, and so the debt burden effectively increased.

Mexico also sought additional credit from commercial banks, which extended an additional U.S. $2.5 billion in loans between February and August 1982. Once the banks were no longer willing to extend more credit, however, the government imposed multiple exchange rates on August 5, 1982, in order to conserve its foreign-exchange reserves. Importers of "unnecessary" goods now had to use a rate twice as high as that used for

[59] Enrique Cárdenas, *La política económica en México, 1950-1994* (Mexico: El Colegio de México, 1996), pp. 113-4.

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debt repayments. Government officials hoped that, in response, Mexicans would import less, thereby making more dollars available to the central bank.

When this policy proved insufficient, the government confiscated all U.S. dollar deposits in the country, converting them to pesos at an official exchange rate that was about one-third below the prevailing market rate. In addition, the government imposed capital controls in order to prevent people from taking their savings out of the country. The controls did not work very well because Mexico's long borders were simply too permeable.

Unable to gain effective control over its citizens' dollar reserves, the government announced on August 20, 1982 that it was unable to repay the roughly U.S.$10 billion in short-term debt that would fall due a few days later.[60] Desperate to prevent the Mexican private sector from using the financial system to spirit dollars out of the country, President José López Portillo (1976-1982) expropriated the country's private banks on September 1, 1982.

The debt default and the bank expropriation together sent the Mexican economy into a tailspin. By the end of 1982, real GDP had begun to fall, rate of unemployment doubled from four percent to eight percent, and gross new investment fell by 27.8 percent in real terms. [61] The situation did not improve any in 1983: Real GDP per capita fell by 5.4 percent, while gross new investment declined by a further 30.6 percent.[62]

The Mexican economy limped along for the next several years, the government simultaneously trying to fight an inflation rate that exceeded 100 percent, growing

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[60] Cárdenas, *La política económica en México*, pp. 114-15.

[61] Cárdenas, *La política económica en México*, pp. 116; Penn World Tables Versión 6.1.

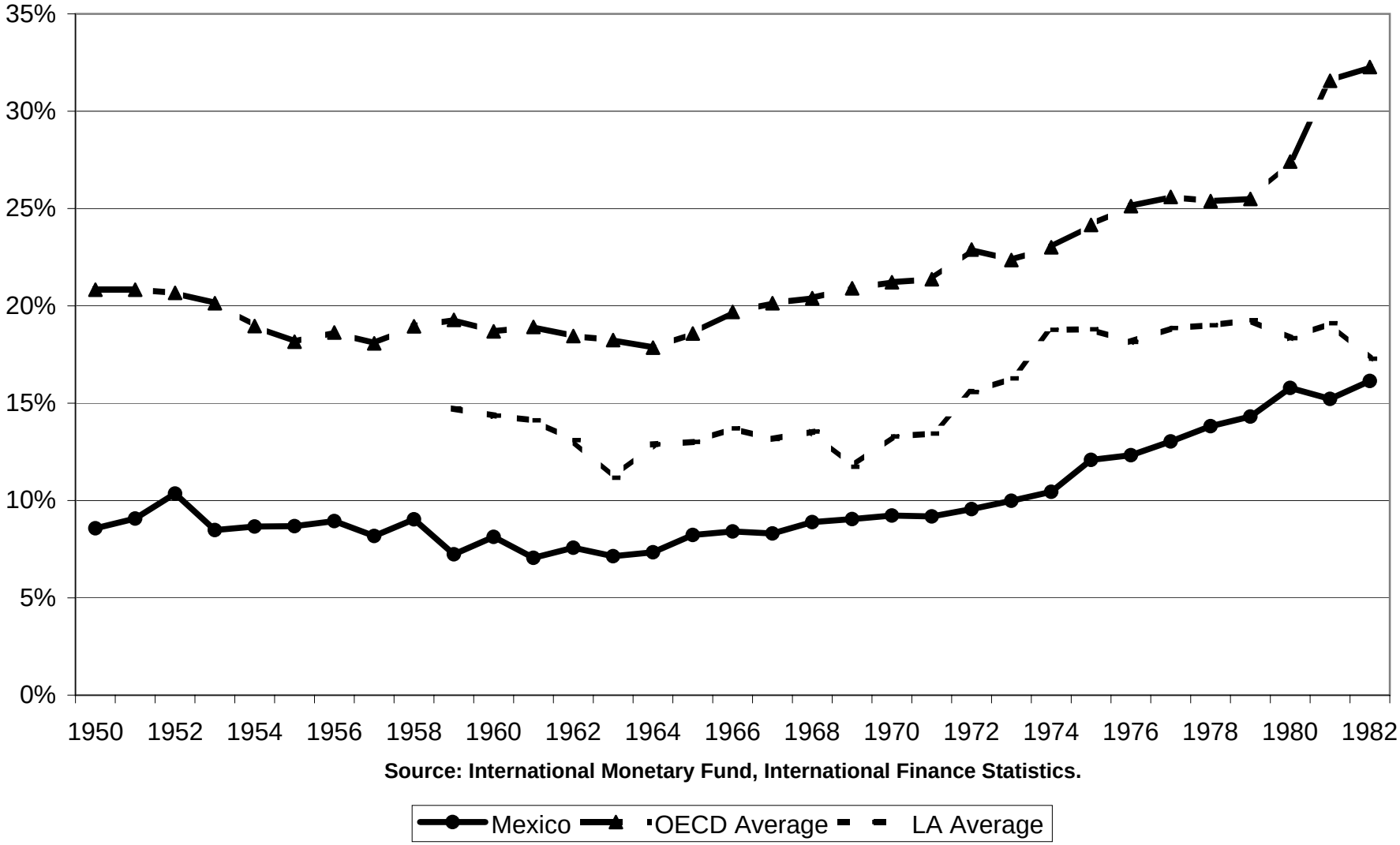
[62] Heston, et. al., *Penn World Table Version 6.1*.

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unemployment, and a fundamental lack of confidence of the country's business class in the PRI. The PRI's leadership ultimately came up with solution to these problems: open the country to foreign trade and foreign direct investment. As we shall see in chapters 3 and 4, this solution had only limited economic success. Moreover, as chapter 5 explores, this solution eventually undermined the very sources of support that had allowed the PRI to dominate the electoral system.

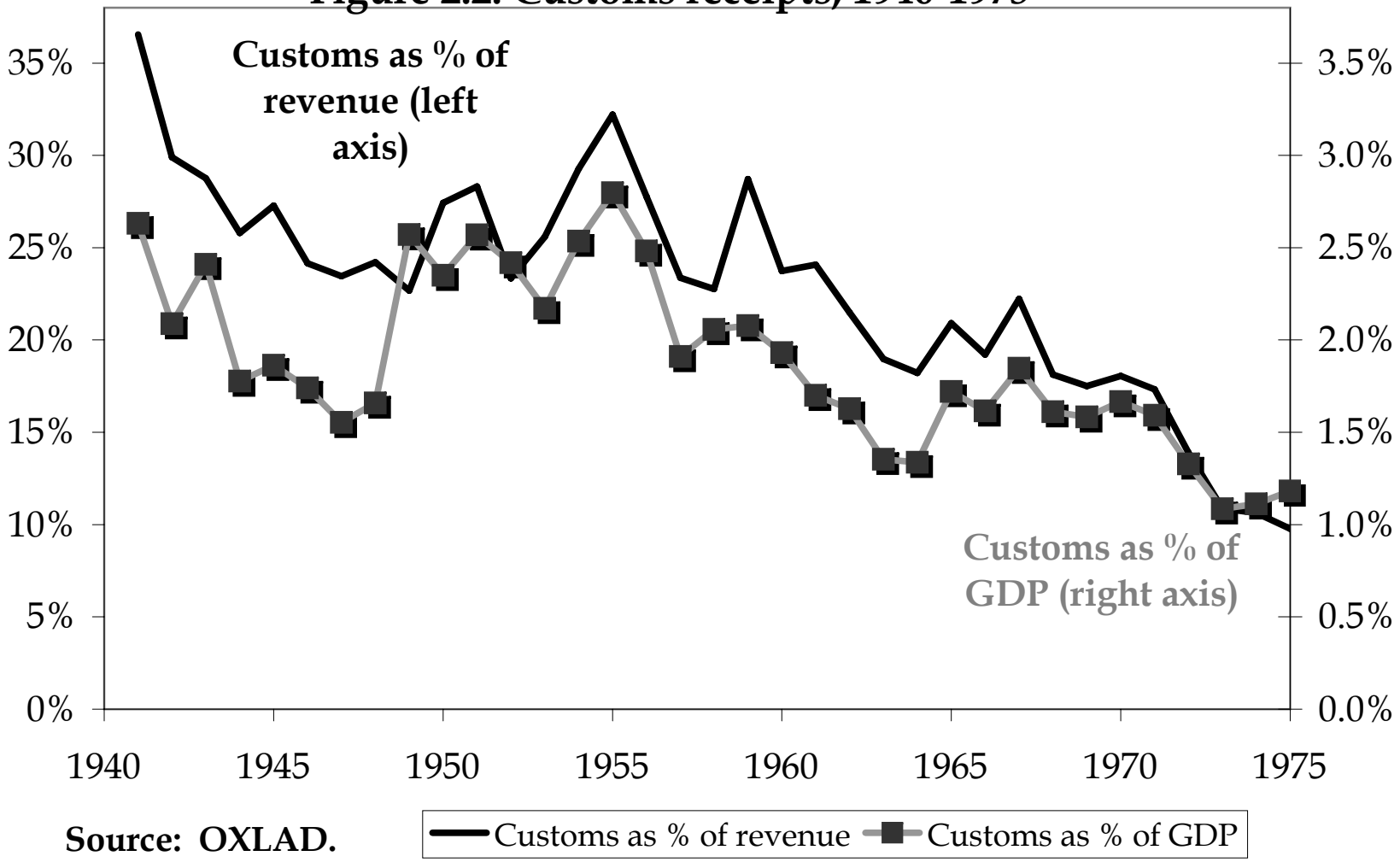
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Figure 2.1: Government Revenues as % of GDP



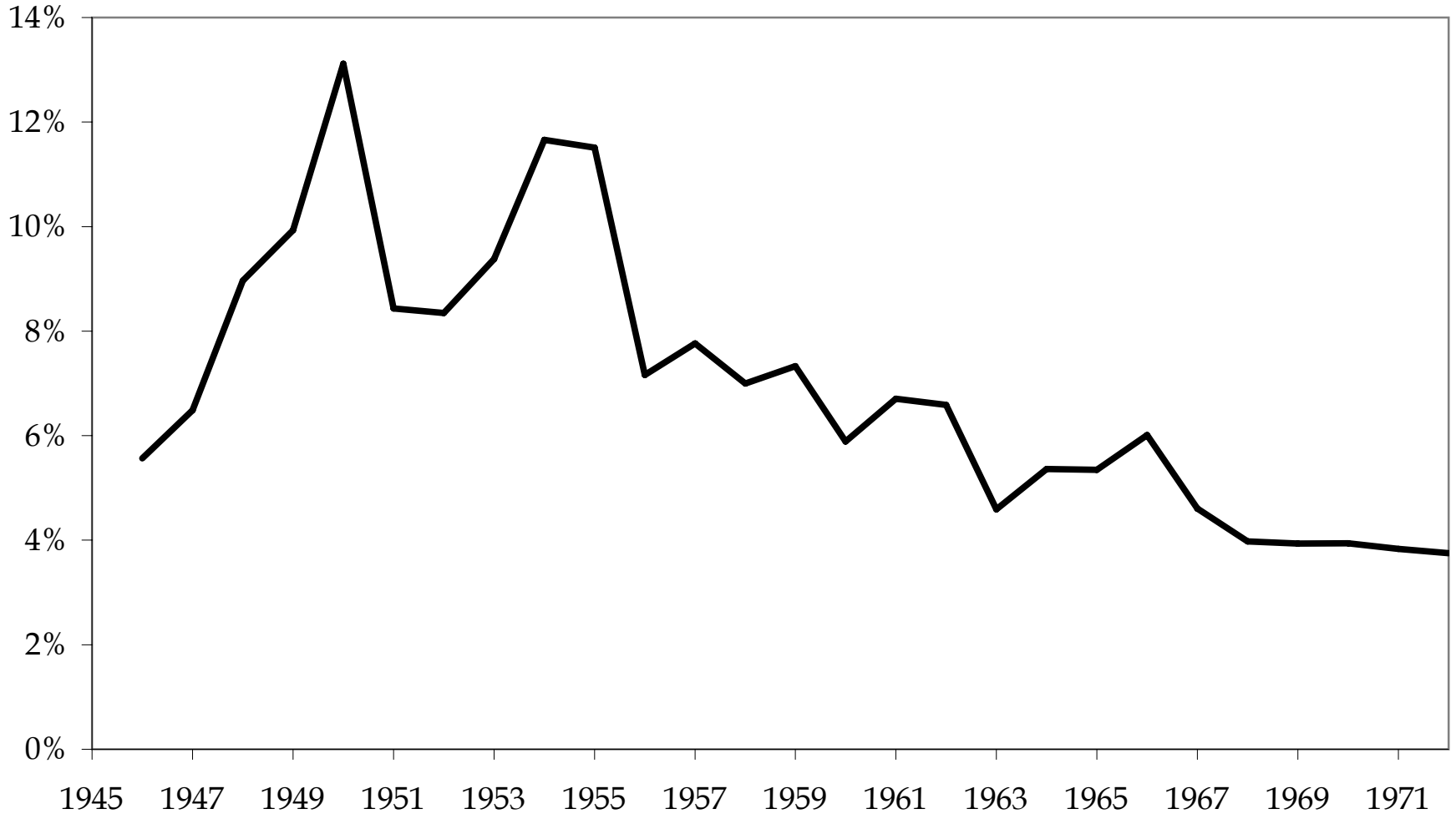
Source: International Monetary Fund, International Finance Statistics.

Figure 2.2: Customs receipts, 1940-1975



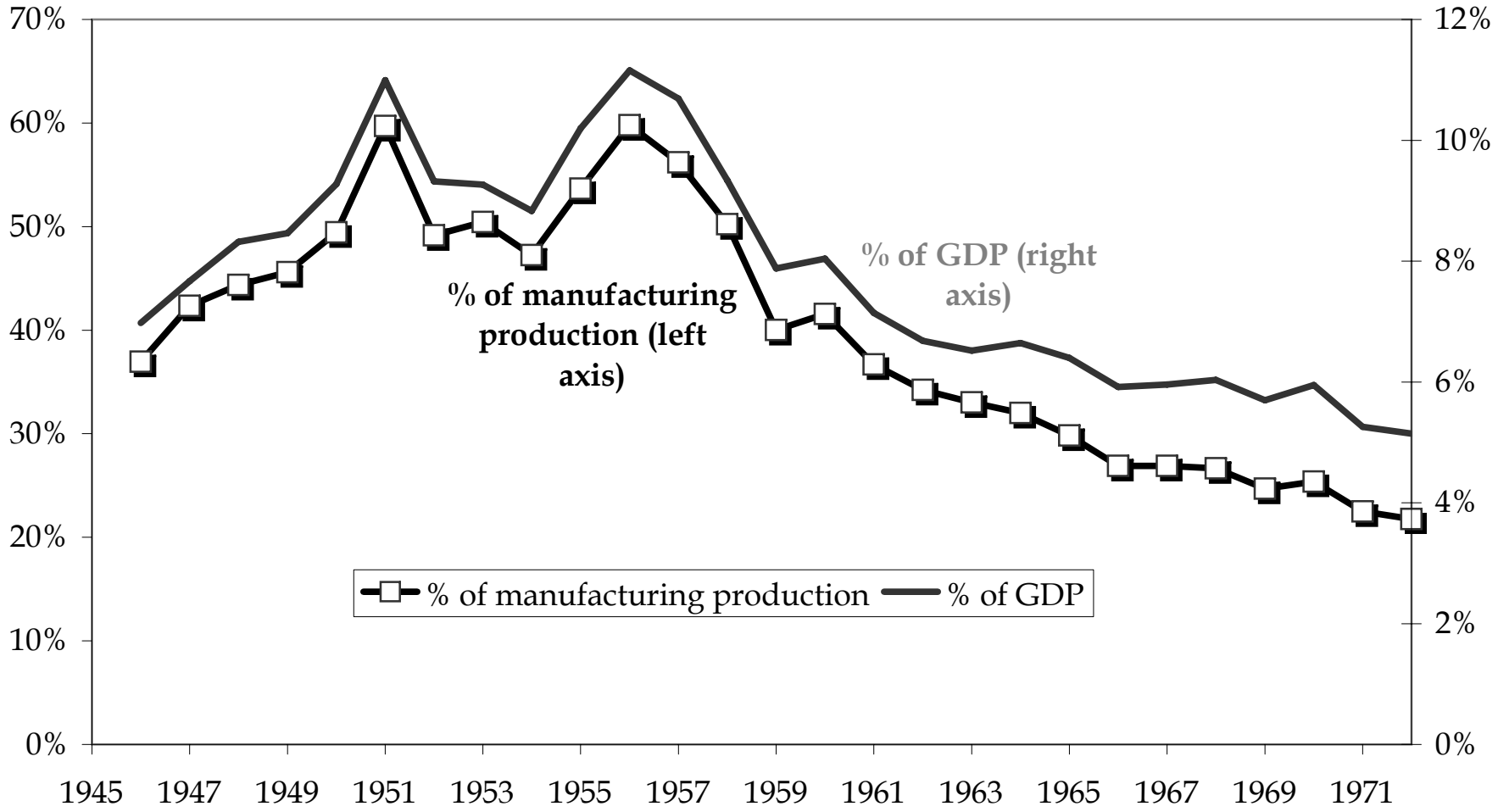
Source: OXLAD.

Figure 2.3: Mexican exports as a Percentage of GDP, 1945-1972



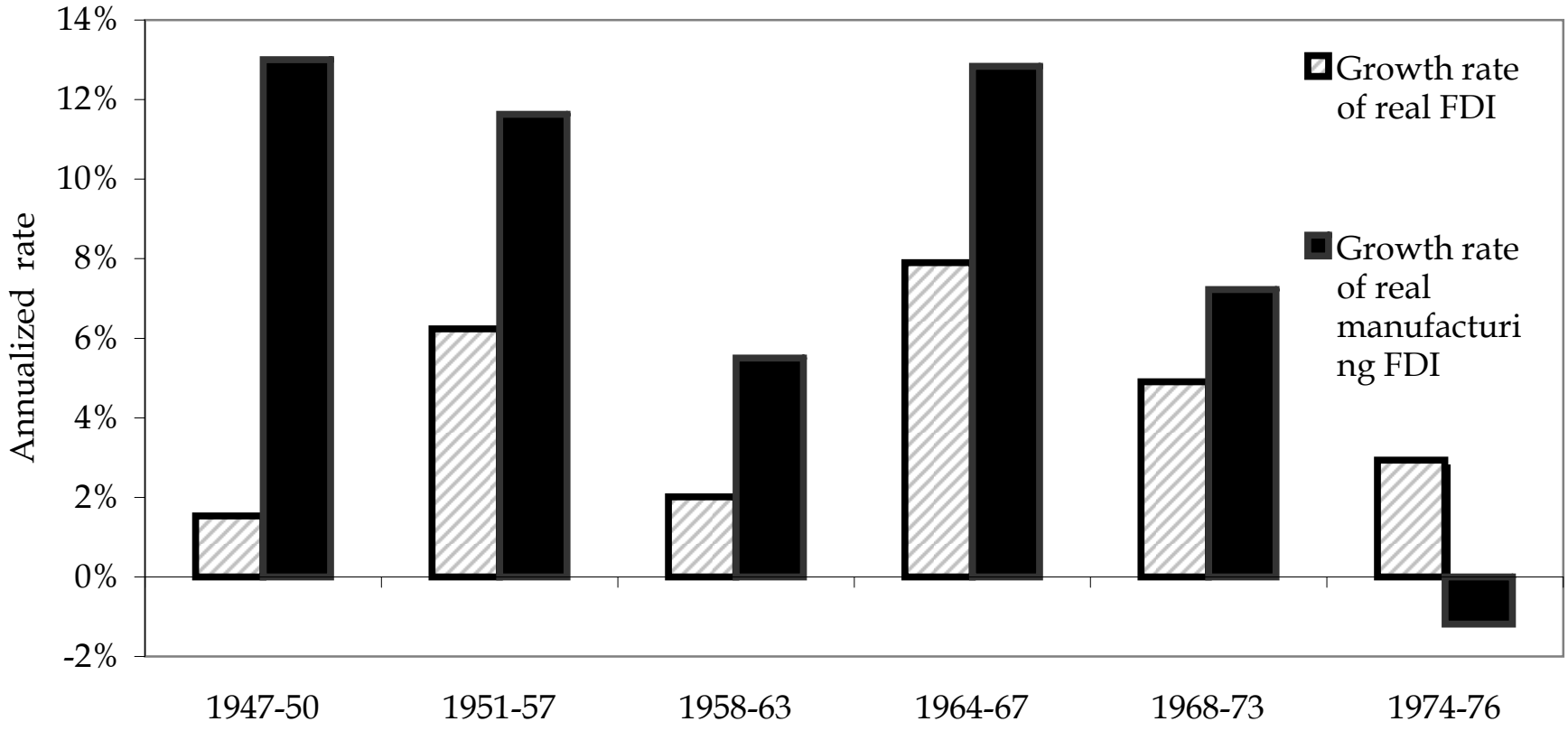
Source: OXLAD data base.

Figure 2.4: Imports of capital and intermediate goods, 1945-1972



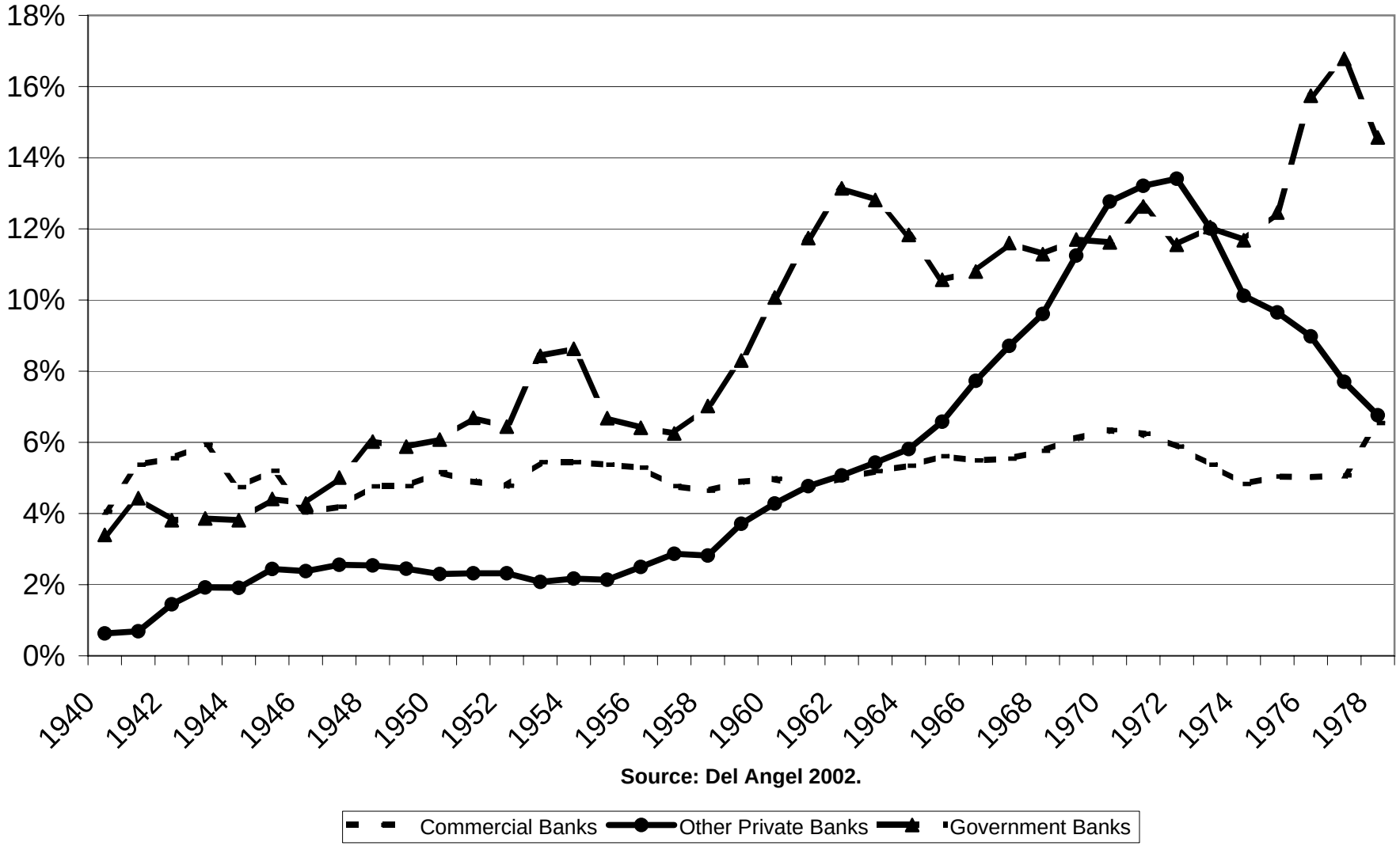
Source: ???

Figure 2.5: Growth Rate of stock of Foreign Direct Investment in Mexico, 1947-1976



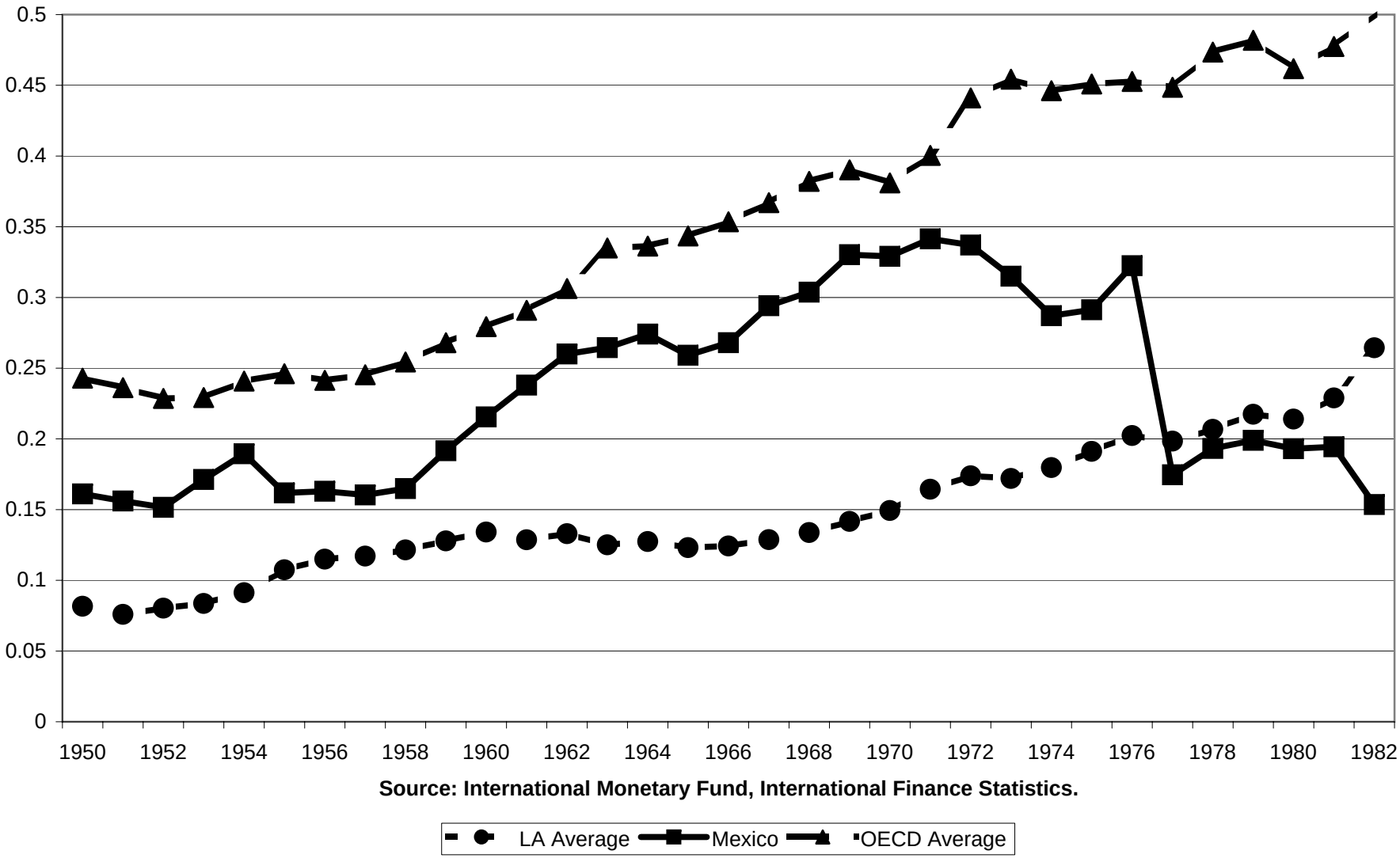
Source: United States Department of Commerce, Survey of Current Business, various years

Figure 2.6: Bank Lending, by type, as % of GDP



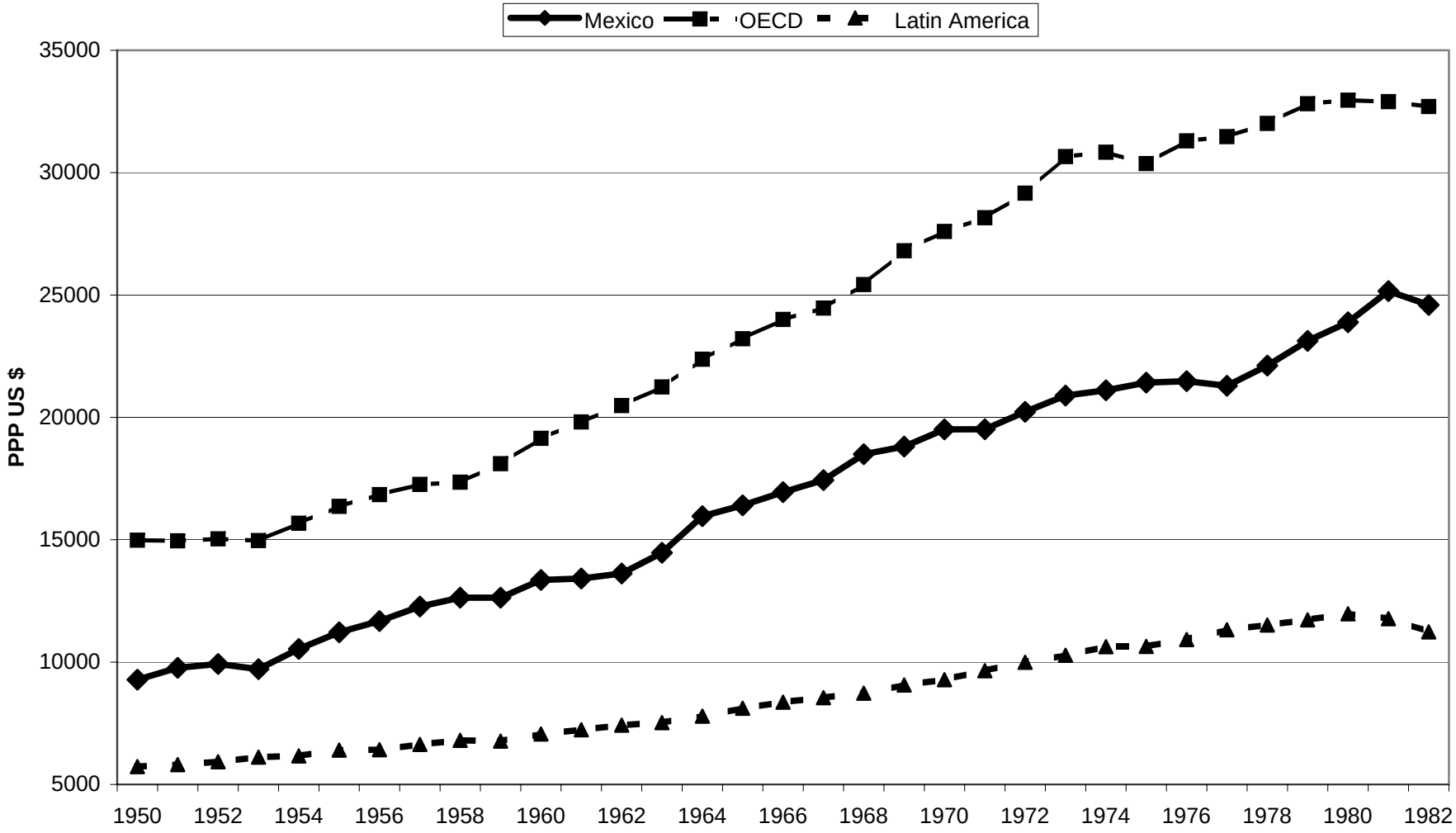
Source: Del Angel 2002.

Figure 2.7: Ratio of Private Credit to GDP



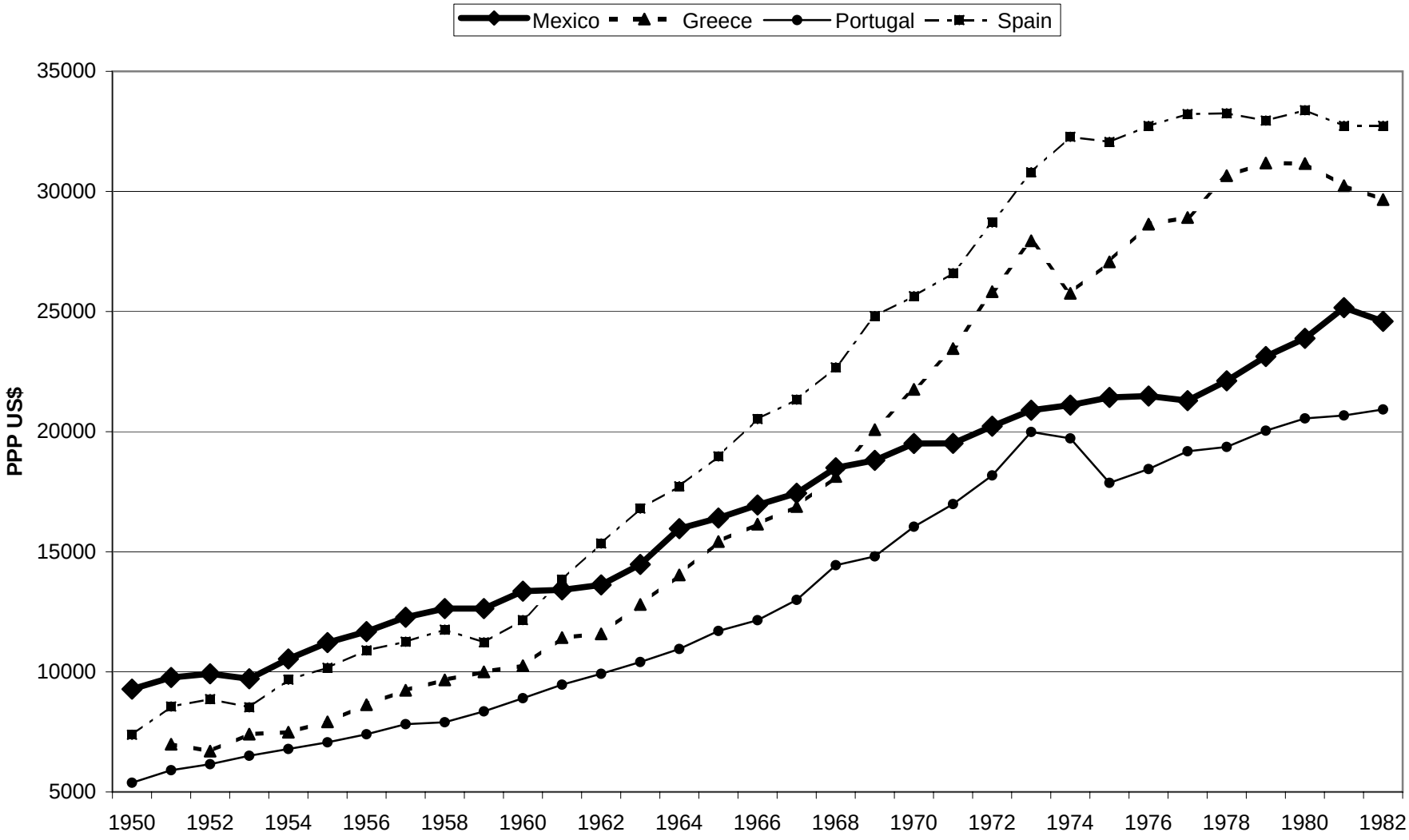
Source: International Monetary Fund, International Finance Statistics.

Figure 2.8: Real GDP Per Worker, 1950-1982



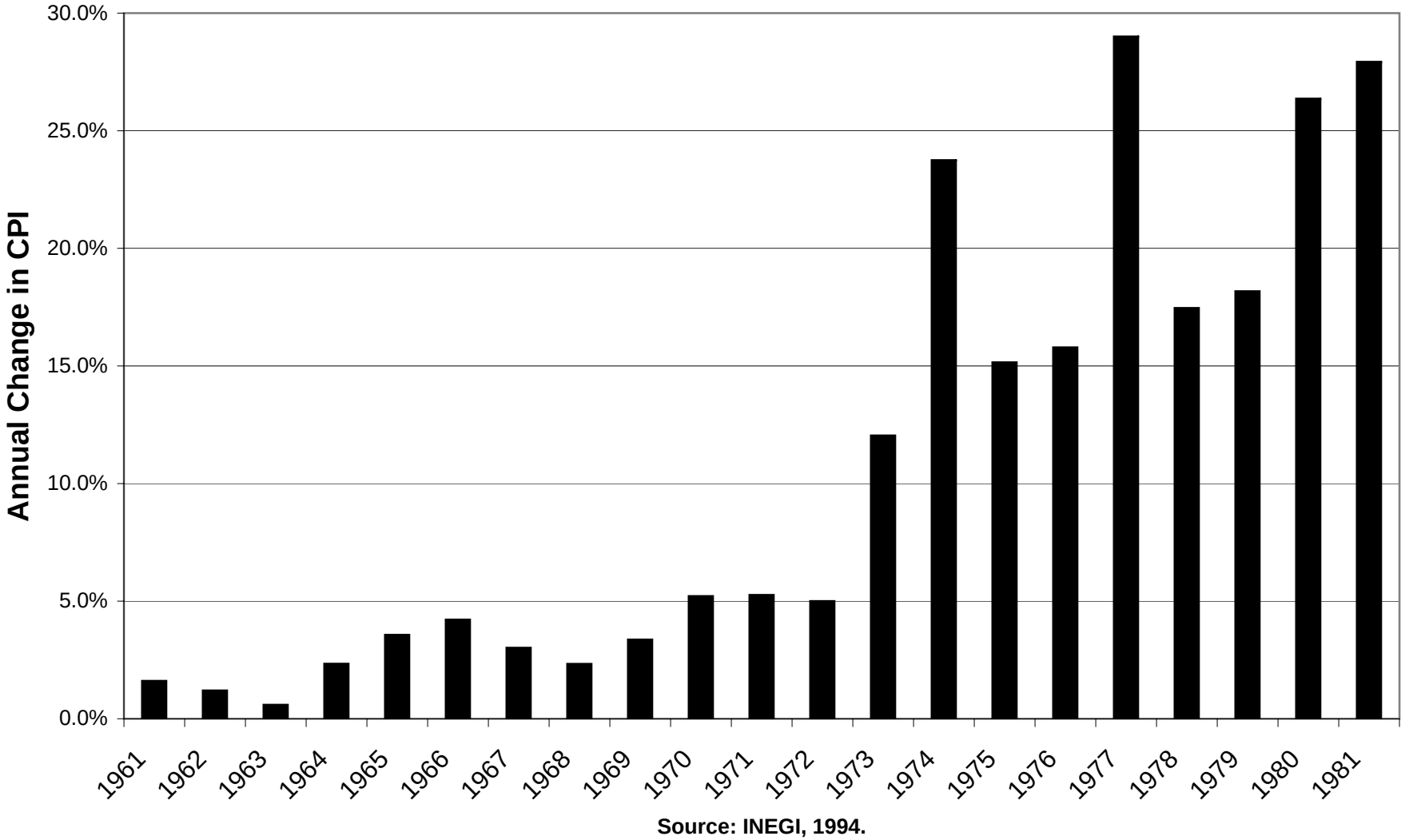
Source: Penn World Tables 6.1.

Figure 2.9: Real GDP Per Worker, 1950-1982



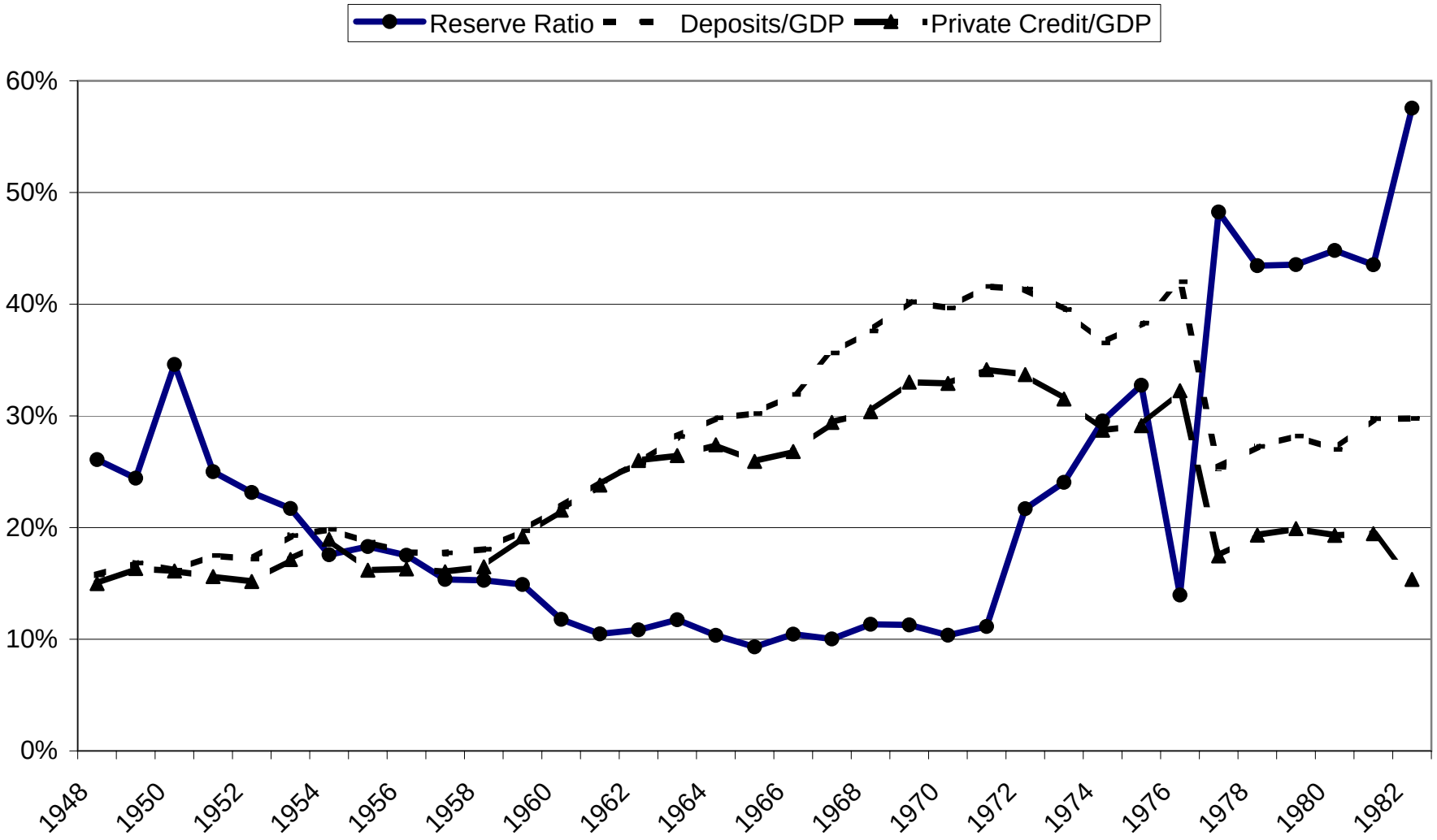
Source: Penn World Tables 6.1.

Figure 2.10: Inflation in Mexico, 1961-1981



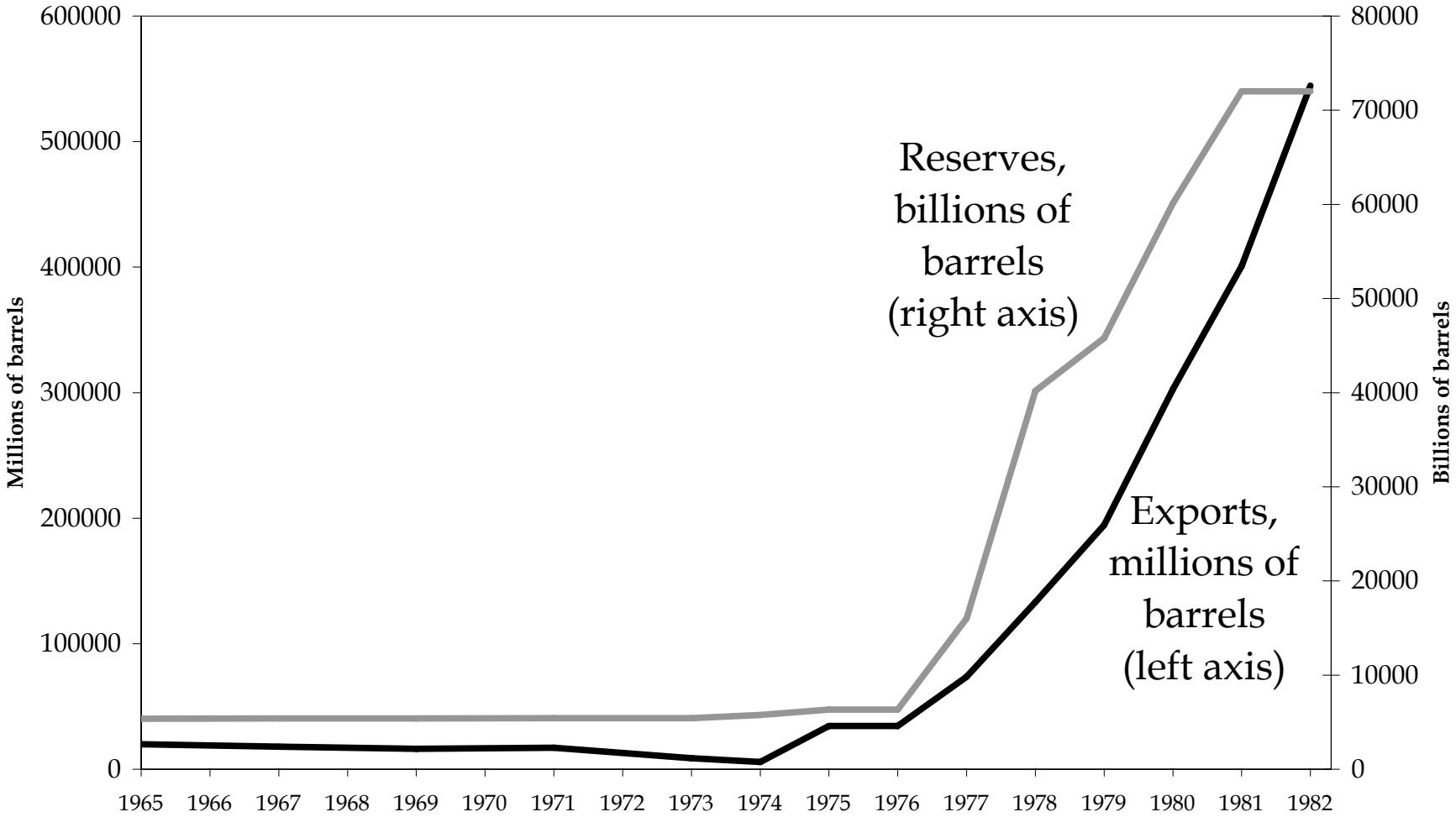
Source: INEGI, 1994.

Figure 2.11: Financial Repression in Mexico



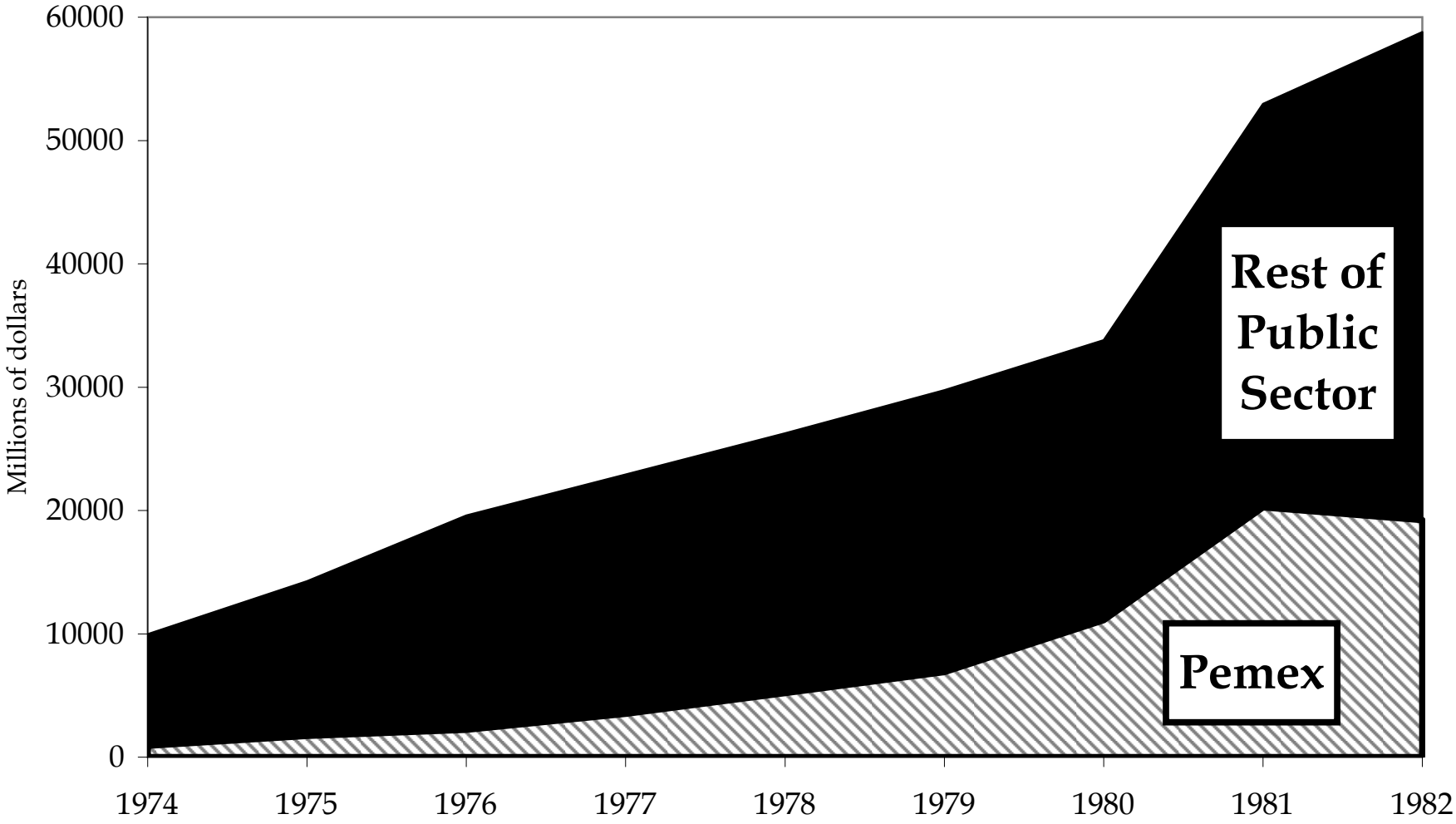
Source: Internatinal Monetary Fund, International Finance Statistics.

Figure 2.12: Mexican Oil Exports and Reserves, 1965-1982



Source: 1974-82, Pemex, Anuario Estadistico 1985, p. 116. 1959-73, Meyer & Morales, Table 19. Reserves, Gavin, Table 1.

Figure 2.13 Mexico's foreign debt, 1974-1982



Source: Meyer and Morales, Table 39.