ONE

Enter Finance

The 1970s

JEDDAH, 1974

"What are the Arabs going to do with it all?" asked *The Economist* in its first issue of 1974. The "it" was dollars, and plenty of them. By 1973 Saudi Arabia had established itself as the "swing" producer in international oil markets, giving it overwhelming control over the supply, and hence the price, of crude. Late that year, the kingdom had used this dominance to explosive effect: on October 16, ten days after Egyptian forces crossed the Suez Canal and launched the Arab-Israeli War, the Saudi-dominated Organization of the Petroleum Exporting Countries (OPEC) announced in Kuwait City that the posted price of oil would rise from $3.01 per barrel to $5.11. Four days later, on October 20—the day after President Richard Nixon announced a $2.2 billion military aid package for Israel—Saudi Arabia cut off all shipments of oil to the United States. Other Arab states followed suit, and by January 1974 the price of oil had risen to over $10 per barrel.

This decisive display of seller's power led to a peacetime redistribution of global wealth on a scale that hadn't been seen in living memory. In 1973 the world's major oil exporters collectively had a current account surplus of around $6.7 billion, equivalent to around 0.5 percent of U.S. GDP. Within a year, that surplus had grown tenfold, to $69 billion, closer to 4.5 percent of U.S. GDP. For the rest of the world, the staggering scale of this transfer of financial resources to oil producers delivered three shocks: a huge deterioration in the trade balances of oil-importing countries, surging inflation, and the collapse of one of the pillars of the world economy, namely, low-cost energy from petroleum.

These are the shocks that gave birth to an era that allowed developing countries, or less developed countries (LDCs), as they were christened then, to regain measurable access to international financial markets for the first time since the 1930s. Memories of that decade had died with the generation that presided over the Depression-era defaults. A new, more confident generation of financiers, with balance sheets empty of any exposure to developing countries, had emerged. And the rules by which these financiers played were made in America. As we will see, the "petrodollar recycling" of the 1970s was governed by U.S. banks and supported by the U.S. government; and it responded to incentives shaped by U.S. monetary policy.

From an arithmetical point of view, the simplest solution to the sudden rise in the surpluses of the oil exporters would have been simply for them to spend those surpluses, creating a source of new demand for the goods and services produced by stricken oil importers. But arithmetic couldn't, in this case, stretch its logic to the real world: the suddenness and size of the increase in oil exporters' wealth made this impossible, since the economies of the oil-exporting countries lacked the capacity to spend at a rate even close to that at which they were accumulating wealth. Saudi Arabia's current account surplus in 1974 was an incredible 51 percent of GDP: it is impossible to imagine a surplus of this scale being spent on goods and services from the rest of the world in a short time.

So a rise in foreign assets, not a rise in spending on foreign goods, was the most obvious consequence of the oil exporters' gambit in 1973. But that left a couple of questions unanswered. If the petrodollars newly arrived on the balance sheets of Arab and other oil-exporting countries needed to go somewhere to earn a return, where would that be? And by what means would they travel?

Answering the first question was pretty straightforward: the surpluses generated by the oil shock would naturally find a home in financing the current account deficits of oil-importing countries burdened by the rise in energy prices. The only visible alternative to this would be misery for oil importers: if they were unable to export their way out of their trade deficits, the only response to the oil shock other than borrowing to pay for it would be to cut domestic spending in order to shrink those deficits. In the context of the early 1970s, though, this was more or less unthinkable. The aftermath of World War II had seen a pleasant surge in global economic activity that, if possible, no one wanted to bring to an end. And for developing countries in particular, the political imperative for strong growth was irresistible. Brazil, for example, had been enjoying what became known as its *milagre econômico*, an economic "miracle" period of exceptionally rapid growth under the military government of Emilio Médici that saw the economy take off from 1968 onward. That miracle was partly the result of increased foreign borrowing by the Brazilian government. So if the existence of petrodollars allowed even more borrowing in a way that would help sustain growth, how could this be a bad idea? That argument also coincided with a moral one: how could anybody defend the proposition that the world's poorest countries pay for the oil shock with low growth?

But if it was pretty obviously expedient to "recycle" the petrodollars in the form of lending to oil-importing countries, that raised a further question of how to do it. The recycling could be managed either by the official sector—by governments and the IMF—or by the private sector. There was a choice to be made, in other words, between policymakers and markets. And, with some supportive elbowing from the U.S. government, markets won. Banks would take in deposits from newly rich oil exporters and lend that liquidity to the importers, whose financing needs had just spiked up.

With little debate, the proponents of an *officially* managed solution to the recycling problem were rather quickly silenced. One of these was Denis Healey, who had become Britain's chancellor of the exchequer in March 1974, a month after promising to squeeze the country's property speculators "until the pips squeak." Armed with a socialist's faith in the redistributive capacity of policymakers, Healey had proposed an official mechanism, a "comprehensive recycling scheme" through the IMF, that would funnel at least $25 billion of the OPEC surpluses to countries that had become saddled with deficits.

On the face of it, Healey's proposals were entirely consistent with the spirit of the postwar consensus on international capital flows. The Bretton

Woods regime that governed the international monetary system after 1945 put states and policymakers—not markets or currency traders—at the center of decision making about capital flows.

But Healey's instincts about the role that policymakers should play in this recycling process clashed heavily with the passionate preference for free-market capitalism that existed within President Nixon's Treasury Department. Reflecting on the U.S. response to his proposal for an official recycling mechanism, Healey wrote that "the Americans were bitterly opposed, because it would have meant interfering with the freedom of the financial markets—and with the freedom of the American commercial banks to make enormous profits out of lending to the Third World."[1] The American whose opposition counted particularly in this case was William Simon, the passionately pro-market U.S. treasury secretary, a "mean, nasty tough bond trader who took no BS from anyone," who was known to wake his children on weekend mornings with buckets of cold water.[2] Simon's view held sway.

Although some of the recycling of petrodollars was, in the end, intermediated through official facilities, it was really the bankers' moment. It wasn't just that the U.S. government was philosophically inclined to allow the private sector to manage the recycling process; it was also that the sheer size of financial markets was already dwarfing the resources available to policymakers. By the end of 1975, the combined assets of the twenty-one largest banks in the United States totaled nearly $400 billion. The lending resources of the IMF and the European Economic Community, by contrast, amounted to just over $20 billion.[3] Nor was it just a question of relative size but of relative confidence, too. The effective collapse of the Bretton Woods regime from 1971 had made it tough to have much faith in the capacity of governments to organize the world's monetary affairs. If governments couldn't manage it, the market was ready to step in.

Just as bankers had descended on Havana in the wake of the 1919 sugar boom, they found their way to Jeddah in 1974, only this time to source funds rather than to lend them. Among them was a thirty-seven-year-old David Mulford, then working for White Weld, a bank, but later to become the U.S. Treasury Department's under secretary for international affairs during the management of the crisis that would engulf the developing world in the 1980s. As he saw it, Saudi Arabia's sudden wealth "was simply mind blowing to investment bankers, aspiring entrepreneurs and con artists of every description."[4]

The task of mobilizing the funds that would finance the petrodollar recycling was actually rather straightforward. The Saudi Arabian Monetary Agency (SAMA), for example, was highly conservative in its investment philosophy. Untrusting of the international monetary system—not too surprising, given the turmoil that had followed Nixon's decision in the summer of 1971 to suspend the dollar's convertibility into gold—the Saudis expressed a strong preference for liquidity. That conservatism may well have been cemented by the fact that SAMA had been governed between 1958 and 1974 by Anwar Ali, a former staff member at the IMF, who, in the view of the *Financial Times* at least, committed the Saudis to "the most orthodox conventions of central banking practice."[5]

By the time Mulford was installed in Jeddah in late 1974, King Faisal had authorized only eighteen international banks to receive SAMA deposits. New banks could be added "only after the most careful scrutiny and the consent of the king and his council of ministers."[6] This preference for bank deposits in deciding how SAMA's dollars were kept was relaxed over time. But what remained consistent during the following years was *where* the dollars were kept. Between 1974 and 1982, Saudi Arabia's cumulative current account surplus was $160 billion, almost all of which was controlled by SAMA and almost all of which ended up in one place: the eurodollar market.[7]

The Supply of Credit

The ease with which petrodollars became a vehicle to finance the deficits of developing countries in the 1970s arose from the fact that these dollars flowed into a market that had been steadily built since the 1960s: the eurodollar market, a pool of dollar-denominated liquidity held in banks outside the United States, and overwhelmingly in London. By the time the oil crisis hit in 1973, the eurodollar market was a fully established financial infrastructure that could happily absorb the flow of petrodollars.

The eurodollar market was in some ways a child of the Cold War. Since state-owned banks in Eastern Europe liked to keep their export revenues out of the regulatory clutches of banks in New York, dollar deposits mushroomed in institutions such as Moscow Narodny Bank in London and Banque Commerciale pour L'Europe du Nord in Paris.[8] And the market's growth was assured because U.S.-based banks faced a raft of regulations that made it difficult for them to pay interest rates competitive enough to mobilize funds. The Fed's Regulation Q, for example, had set ceilings on interest rates offered by banks for deposits located in the United States. Holding deposits outside the United States allowed these banks to pay higher interest rates on their deposits, and had the additional advantage of allowing banks to avoid the U.S. interest equalization tax, which since 1963 had eaten into the returns on foreign securities held by U.S. residents. And by taking deposits outside the United States, banks could also avoid reserve requirements, so freeing up more resources to lend.

In other words, the growth of the eurodollar market was partly a story about international politics and partly a story about U.S. banks' efforts to escape financial repression at home. The net size of the market rose from $160 billion in 1973 to $600 billion by 1980.[9]

But the existence of petrodollars and the development of the eurodollar market don't offer a full explanation of what pushed credit toward developing countries in the 1970s. U.S. inflation also takes on a particular role in this story, largely because of what it did to the real, or inflation-adjusted, interest rate in the United States. At least until the late 1960s, the U.S. inflation rate had been unworryingly low, and so real interest rates were reliably positive. Throughout the 1960s, for example, U.S. inflation averaged 2.4 percent, and the average federal funds rate was 4.2 percent, giving a real interest rate of 1.8 percent. Since positive real interest rates act as a magnet for capital flows, this state of affairs kept money attracted to the United States.

By the early 1970s, though, the inflationary environment in the United States had changed beyond recognition because of three shocks. The first was a surge in agricultural prices that pushed U.S. food inflation up to 20 percent in 1973, from only 5 percent the year before. The second was the oil shock of October 1973, already described. And the third was the end, in April 1974, of a wage-price freeze that President Nixon had introduced in the summer of 1971.[10] Moreover, lurking behind these shocks was the dramatic depreciation of the dollar against other international currencies, a slide that had followed Nixon's suspension of the dollar's convertibility into gold in August of that year. By the summer of 1973, the dollar had lost a fifth of its value against other major currencies. Indeed, the diminishing purchasing power of OPEC's dollar-denominated revenues almost certainly helped convince OPEC to deploy the "oil weapon" in late 1973.

The U.S. inflation rate hit double digits in 1974, and would do so again in 1979–80 in the wake of the second oil shock. For the decade as a whole, the average U.S. inflation rate—around 7 percent—was almost three times the average of the previous two decades. And the result of this inflation was to push real U.S. interest rates below zero. The inflation-adjusted federal funds rate turned negative in 1974 and stayed negative through to 1980. The effect of this was to push capital toward developing countries in search of higher yields, just as negative real interest rates had pushed capital to Cuba in 1919.

And it seemed perfectly sensible for money to allow itself to be pushed toward developing countries, since this was the part of the world where growth prospects seemed brightest. Even before the oil shock, developing countries' GDP growth had started to exceed that of the industrialized world. This was a relatively new phenomenon, since even up to the mid-1960s it was normal to expect economic growth in the rich world to be faster than it was in the poorer one. Things had started to change in the late 1960s, though. Between 1968 and 1973—the era of Brazil's miracle—annual GDP growth in the developing world was an average of 7.5 percent, compared to 5.1 percent for industrialized countries as a whole. The growth differential, in other words, was 2.4 percentage points. By 1974, or year one of the petrodollar recycling process, the differential had risen to 5.2 percentage points: the developing world's growth rate was 6.1 percent, compared to a growth rate in the industrialized world of just 0.9 percent.

Banks were in the happy position of finding themselves trapped in a virtuous circle: negative real interest rates in the United States made it sensible to lend petrodollars to developing countries, which in any case looked attractive because of the more rapid economic growth rates to be found there. And since those loans would help support higher rates of investment spending in these countries, rapid growth in the developing world could be both the cause and the consequence of making petrodollars available to them. It helped, too, that since developing countries had effectively been locked out of world capital markets since the early 1930s, international banks weren't exactly overburdened with financial exposure to developing countries. On the contrary: banks had barely any exposure to them. New lending to these economies could be justified by the banks quite simply as a way of achieving a basic stock adjustment in their loan books, an exercise in portfolio diversification. And all this came with the enthusiastic encouragement of Washington. According to William Seidman, an economic adviser to President Gerald Ford, "The entire Ford administration, including me, told the large banks that the process of recycling petrodollars to the less developed countries was beneficial, and perhaps a patriotic duty."[11]

For banks, then, the economic incentives to lend to developing countries were clear. Finally, one innovation from the late 1960s made the wholesale mobilization of funds really quite simple: the syndicated rollover credit. Banks could lend in dollars at a margin over their cost of funds (the London Interbank Offered Rate, or LIBOR), which would be determined every three or six months on a floating basis. The risk of default by the borrower was spread across many banks by the loan manager responsible for putting together the syndicate of lending banks. The loan manager earned nice fees, and syndicate members could add assets to their balance sheets with minimal administrative cost. The banks carried neither interest rate risk nor currency risk: these belonged to the borrowers entirely.

The Demand for Credit

For developing countries, the idea of getting plentiful access to financing from international banks was a wholly new one in the postwar era. Before petrodollars existed, capital flows to developing countries were mostly made up of development aid and export credits offered by rich-country governments. Private capital flows were very much in the minority and were mostly accounted for by inflows of FDI. The legacy of bond defaults in the 1930s still lingered. In 1970, for example, the sum of export credits and official development assistance accounted for 60 percent of external financing for developing countries; FDI explained a further 20 percent.[12] Moreover, these flows were of tiny size in relation to the receiving countries' economies.

External financing from international banks—and what amounted to the privatization of capital flows to developing countries—opened up a world of pleasant possibilities for these economies. In the first place, the ability to borrow abroad allowed them to avoid the nasty alternatives of either adjusting to higher oil prices by squeezing their spending on imports of other goods or trying to do with less oil, either of which would have been recessionary. That would have been particularly unwelcome, since the rapid growth rates that developing countries had enjoyed in the late 1960s and early 1970s naturally generated popular expectations of more to come. The availability of external financing created a sense of hope that foreign capital could add to domestic savings, and so support levels of investment that would otherwise be unimaginable. This was the theme of a paper issued by the Brazilian central bank in 1973 titled "The External Sector and National Economic Development."[13] It reflected a line of thinking that was widespread at the time.

The ability to get funding from international banks had another attraction, too: it seemed to imply a much smaller loss of national sovereignty than any of the alternatives.

Inflows of FDI in particular had a bad smell in the early 1970s: allowing foreign firms to own manufacturing capacity seemed like an affront to a developing country's sense of autonomy. And this view was being strengthened by the growing role that foreign firms were playing in some places: by 1972, foreign-owned firms accounted for half of total manufacturing sales in Brazil.[14] One response to this sense of being taken over was to legislate: in 1973, for example, the Mexican government passed the "Law to Promote Mexican Investment and Regulate Foreign Investment," which had the effect of excluding foreign firms from investing in Mexican railways, electricity, or communications. In contrast, borrowing from international banks seemed to imply no compromise at all of national autonomy. This idea was nicely reinforced by the fact that banks seemed happy to lend without asking too many questions about how funds were to be spent. The petrodollar recycling process in the 1970s abandoned the principle that bank lending should be linked to some specific end use. Instead, lending was offered to support rising deficits in the budget and the balance of payments.

Trade deficits became as quickly visible for developing countries as the surpluses did for OPEC members. Between 1974 and 1977, major oil exporters enjoyed an aggregate current account surplus of $175 billion. Those countries included Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, the UAE, and Venezuela. During the same period, the cumulative current account deficit of the rest of the developing world was around $145 billion. So the math of the recycling process was neat. And it is worth stressing how this really was a phenomenon associated with the developing world, not the developed one: during these years, the industrialized countries managed to eke out a total overall current account surplus of $6 billion.[15] Rich countries as a whole had little need for petrodollars: their main problem came from the inflationary consequences of the oil shock, rather than its effect on the balance of payments.

The logic of the petrodollar recycling process was that oil importers should, in effect, be borrowing the surpluses of oil exporters to finance their deficits. And at the start of the process in 1974 that is more or less what happened. The developing countries with the most obvious borrowing needs were oil-importing countries. But without much delay, oil-*exporting* countries also found themselves signing syndicated loan agreements and building up stocks of external debt.

In the end, a group of fifteen countries found themselves at the heart of the international lending boom of the 1970s: Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, Venezuela, and Yugoslavia (the "Baker 15," described further in chapter 2). Since this group included oil exporters as well as oil importers, the obvious question is, what was common to these countries that made foreign borrowing so attractive?

The answer was simply the desire for growth. In the mid-1970s, it was perfectly reasonable for a developing country's policymakers to worry about economic performance: the industrialized world as a whole was perilously close to recession in 1974 and 1975, and the United States itself spent most of those two years suffering negative rates of GDP growth. Access to international financial markets allowed developing countries to supplement domestic savings with foreign savings and so keep their economies' engines running.

International borrowing was attractive for another reason, too: its ability to add muscle to the role of the state. The 1970s saw a vast spreading of the economic influence of the state in the developing world. This was enabled by access to credit, since governments had new resources with which to expand their sphere of activity. The number of Mexican state-owned enterprises, for example, grew from thirty-nine in 1970 to 1,155 in 1982; the government became not just an airline operator and hotel owner but a cheesemaker and sugar distributor.[16] Much of this expansion of the state was supported by the Mexican development bank, Nafinsa. As early as 1974, the bank held equity stakes in ninety-eight Mexican firms, and by the late 1970s Nafinsa was the obligor, or borrower, for around one-third of Mexico's external debt. In this state-centered world, Mexico's planning ministry, established in 1976, quickly became the most reliable path to ultimate power there: Miguel de la Madrid, Carlos Salinas de Gortari, and Ernesto Zedillo all held the position of planning minister before assuming the country's presidency.

The ability of governments to strengthen their role in the economy during the 1970s was made easier by the fact that they were largely doing the borrowing. In the 1970s, the private sector's external debt in the fifteen countries listed above rose from $15 billion to $63 billion. But the public sector's external debt, including guarantees issued on behalf of private sector borrowers, increased from $40 billion to $245 billion.

How ironic it is that the privatization of capital flows in the 1970s should coincide with a nationalization of economic power in the borrowing countries! Just when rich-country policymakers like Denis Healey seemed at risk of becoming slaves to market forces, policymakers in the developing world were able to feel like masters.

Nowhere was this rise of state power clearer than in Brazil. The country's external borrowing in the 1970s ushered in an era of "big projects," partly funded by generous subsidies available from the public development bank BNDES and from Banco do Brasil. These subsidies, and the rise of state-owned industrial enterprises in the energy, steel, telecommunications, and transportation sectors, would have been unthinkable without the resources available to the government from foreign borrowing. By 1978, public enterprises accounted for 78 percent of the assets of Brazil's 200 largest companies, up from 64 percent in 1972.[17]

Outside Latin America, too, external borrowing fed the growth of the state. The industrialization of Korea—which discovered the virtues of export-oriented development much sooner than did Latin America—was also very substantially state-driven. By the mid-1970s, the public sector was responsible for between a third and a half of investment in Korea.[18] The 1970s were a decade in which debt, industrialization, and the growth of the state each supported the other two.

Yet there were also countries where the growing strength of the state lived side by side with a more indulgent attitude toward the private sector and a more open attitude toward trade. Chile provided the perfect example of this approach. The coup that brought General Augusto Pinochet to power in September 1973 was publicly defended as a necessary response to the economic chaos that had been threatened by the socialism of his predecessor, Salvador Allende. And there was some good reason to describe Allende's economic policies as chaotic: in 1973, the budget deficit reached an astronomical 22 percent of GDP, a huge leap from previous years, and inflation exploded, hitting an average of 311 percent despite the existence of price controls.

Pinochet's efforts to achieve economic stabilization relied on tight fiscal and monetary policy. By 1975 the budget deficit was down to 2.5 percent of GDP. Yet the economic consequence of this dramatic fiscal squeeze was a severe contraction in the economy: GDP fell 13 percent in 1975. This was the age of the "Chicago Boys," U.S.-trained economists with a rigorous set of views fixated on minimizing the state's involvement in economic affairs and on liberating the private sector. Their influence, after Jorge Cauas took over the Finance Ministry in 1974, led to some revolutionary changes in the structure of the Chilean economy. Between 1974 and 1976, ninety-nine firms were privatized, along with thirteen packages of bank stocks, and the average import tariff fell from 94 percent to 27 percent.[19]

The decline in inflation took longer: it was only in 1977 that Chilean inflation fell back below 100 percent, having peaked at 750 percent in April 1974. It is in the inflation story where we see yet another source of the demand for credit on the part of borrowing countries. In the 1970s, developing-country policymakers discovered how capital inflows can help keep inflation low.

As Chile's experience shows, it wasn't only the United States or other rich countries that had to deal with inflation shocks in the 1970s. Inflation in developing countries had been relatively well behaved in the years running up to the 1973 commodity price shocks, remaining in the single digits on average in the late 1960s and early 1970s. But all that changed in 1973, just as it had for the United States, and by 1974 the average inflation rate for developing countries had risen to 21 percent. Although Chile's inflation rate for that year was exceptionally, even absurdly, high, there were plenty of other countries for which inflation was becoming an unwelcome distortion. In 1974 inflation reached 47 percent in Indonesia, 33 percent in the Philippines, and 28 percent in Turkey.

How could a developing country use capital inflows to push inflation down? The answer comes from the fact that capital inflows can help stabilize the nominal exchange rate. If a country keeps its exchange rate stable against the dollar while its inflation rate is high, then imports become cheaper relative to goods produced locally. That helps to push down the local inflation rate because the lower price of imported goods acts as a gravitational force on the price of goods in the whole economy. The consequence of making imported goods cheap is that the trade deficit widens, because more firms and households buy relatively inexpensive foreign goods. But when capital flows from abroad are available, that problem is solved because the deficit can be financed.

In other words, being able to borrow from abroad gave developing countries the chance to use exchange rates as a tool to push inflation down. So-called "exchange rate–based stabilization" made use of newly available capital flows to solve an inflation problem, just as these capital flows were simultaneously helping to support economic growth. Just as the breakdown of the Bretton Woods system of managed exchange rates was delivering a lesson to the developed world that fixing currencies was impossible, developing countries were discovering the opposite. The availability of external financing made it seem that pegging currencies, or heavily managing them, was rather straightforward.

The combination of relatively fixed exchange rates and relatively high domestic inflation in developing countries led, in plenty of cases, to a dramatic loss of competitiveness through an appreciation of the real, or inflation-adjusted, exchange rate. And in the 1970s that added a hugely destabilizing element to the relationship between developing countries and international finance. As dollars became extraordinarily cheap in real terms, the demand for them went up. And as this demand went up, capital *outflows* from developing countries became a more visible phenomenon, in the form of capital flight.

A Different Kind of Recycling

Capital flight is an idea that is tricky to pin down but implausible to deny. It is possible to question, for example, whether there was any real difference between an Argentine citizen who opened a bank account in Miami in, say, 1978 and an American who sold shares in IBM and bought shares in General Motors. Both the Argentine and the American could be described as "adjusting their portfolio." So the definition of "capital flight," as opposed to "portfolio reallocation," can be a matter of subjective judgment more than strict technical interpretation. But that value-laden distinction matters: the idea of capital "fleeing" a country seems to suggest that an investment is in conflict with the objectives of a country's policymakers, imposes some large economic cost on the country, or is in some sense illegal.

Capital flight in the late 1970s and early 1980s trapped developing countries in a vicious circle of needing to borrow further to finance these outflows. And sometimes the outflows weren't particularly visible: a popular form of expatriating capital is to lie about the value of trade. An exporter that wants to keep dollars abroad can simply understate the value of a shipment of goods that's being sold abroad, so that the difference between the shipment's true value and its reported value is kept offshore without detection.

As long as international borrowing was helping to sustain a state of affairs in which domestic residents could think that dollars were unsustainably cheap because of domestic currency overvaluation, those residents would keep buying them. And the countries that seemed to suffer the most dramatic capital flight were ones in which policymakers, in their pursuit of low inflation, allowed currencies to become overvalued and in which little effort was made to restrict capital outflows. Countries like Brazil or Korea, where exchange rate policy generally sought to avoid overvaluation, usually suffered less from capital flight.

For the countries that did suffer, its effects were devastating. In Argentina, for example, an exchange rate–based stabilization had initially helped to deliver an astounding appreciation of the inflation-adjusted exchange rate: if the level of the real exchange rate was 100 in 1975, by 1980 it had reached 270. This was achieved through the *tablita*, a pre-announced pace of currency devaluation much lower than the inflation rate. Argentines were dazzled by the purchasing power of their pesos and, given the ability to buy cheap dollars, began to take those dollars out of the country. These were the years of *plata dulce* ("easy money," loosely translated), when families of Argentines could be seen struggling through the airport in Buenos Aires on their way back from a shopping spree in Miami or Europe, laden with color TV sets.[20] The devastation here is the way in which an overvalued currency pushes up spending power abroad: middle-class Argentine consumers felt happy, but at the expense of draining the economy of foreign exchange.

In the 1980s, the question of how to measure capital flight became the subject of obtuse academic controversy, but an intuitive approach is to consider the sources and uses of foreign exchange. A country generates net inflows of foreign exchange from net foreign borrowing and from net inflows of FDI. It uses those sources to finance a current account deficit (if it has one) and to accumulate foreign exchange reserves. So one measure of capital flight is simply the difference between those sources and those uses. On this measure, two-thirds of the increase in Argentina's external debt between 1976 and 1982 can be explained by the need to finance capital flight. For Venezuela, almost *four-fifths* of its rise in indebtedness was necessitated by capital flight.[21]

The idea that developing countries were borrowing to finance capital flight caused banks some ambivalence. On the one hand, there was a slow accumulation of evidence that the flow of debt had become disconnected from investment spending, and that was a source of worry. If lending was no longer meaningfully supporting the economic development process, then the case for lending should, in theory, collapse. On the other hand, these same banks played a role in intermediating this flight and profited from it: their private banking operations were built up in these years to provide a home for the wealth that was seeping out of Latin America.

The birth of large-scale capital flight in the late 1970s grew into a phenomenon that would undermine the case for continued lending to developing countries, since the latter's accumulation of debt had clearly become unshackled from any activity that could generate a return sufficient to repay it. And from 1979 on, it wasn't just the acceleration of capital flight that threatened the sustainability of the banks' relationships with developing countries. There was also the small matter of the second oil shock and the response it elicited from the U.S. Federal Reserve.

The Descent

On February 1, 1979, a plane from Paris landed in Tehran with a passenger, Ayatollah Khomeini, whose arrival in Iran would lead to a second round of petrodollar recycling. The Iranian revolution that Khomeini led caused a collapse in the country's oil industry, with the result that during the first quarter of 1979 the world economy was operating with 2 million barrels per day less oil than it had in late 1978. By late 1979 the price of crude oil had reached $39 per barrel, having been below $13 per barrel during 1978. The increase was partly driven by the world's sense of panic that this new shock to the oil market was an echo of the dislocations that had accompanied the first shock six years earlier.

The second oil shock started a process that turned into a crisis three years later. International lending to developing countries continued because the established logic of petrodollar recycling demanded it. The combined current account surplus of the major oil-exporting countries, having fallen to just $3 billion in 1978, rose to $70 billion in 1979 and to $115 billion in 1980. So plenty of resources were available to finance a new recycling process, and banks remained willing. Indeed, the pace of international lending accelerated. In the six years between 1972 and 1978, banks had lent $130 billion to the fifteen major developing country borrowers, the "Baker 15." Yet in the three years between 1979 and 1981, banks lent $150 billion.

Banks were able to convince themselves that they were reliably managing the risks associated with the rising debt burden of sovereign borrowers in the developing world. Lending maturities grew shorter and lending spreads widened in the aftermath of 1979. Yet all this did was to produce a kind of collective-action problem: for any individual creditor, making new loans on less generous terms seemed like a simple act of prudence. Yet for creditors as a whole, the riskiness of their portfolios increased as the frequency and cost of refinancing for their sovereign borrowers became more and more burdensome.

Those risks were compounded by a pattern of behavior on the part of lenders that took on characteristics that were more animal than rational. The herd instinct is simply to do what others do, lend where others lend. This may seem irrational, but it doesn't lack reasons. The best way for a bank to make use of the information that it thinks others might have is to copy them. In the late 1970s and early 1980s, this was not self-evidently absurd, since this was a time when economic information about developing countries was relatively scarce, and published with long delays. Balance-of-payments data could take a year to materialize. The *World Bank Debt Tables* could be eighteen months out of date. So, for any individual lender, the information that was coming from what others were doing took on unusual significance. And since in any case a bank's performance is measured relative to that of its competitors, straying too far from what others are doing may not be sensible—particularly since it is usually more comfortable to be wrong in company than it is to be wrong on one's own. Moreover, following the herd can seem like a reasonable strategy because a country's creditworthiness is partly determined by its ability to borrow: as long as it can do so, then an argument, however circular, can be put together by any individual lender to keep lending.

The accelerated rise in the external debt stock of developing countries did tease out voices of dissent: economists and policymakers who worried about whether both borrowers and lenders were becoming irresponsible. Among these was Henry C. Wallich, a Federal Reserve Board member, whose concern was motivated by the principle that "credit is suspicion asleep." He made the point, in a 1981 speech, that by the end of 1980 there were eighty U.S. banks for which exposure to a single LDC amounted to over 30 percent of their capital, up from only thirty-six banks in June 1979. In some cases, he said, "one wonders whether for some banks their in-house country limits are not more nearly marketing objectives."[22]

Although the voices of concern about the risks facing developing countries grew louder from 1979, the banks remained confident. Walt Wriston, Citibank's chairman and the preeminent banker of his time, expressed that confidence aggressively in 1981: "It is no secret that over the years a lot of intellectual capital has been invested in the proposition that massive defaults in the Third World will cause a world financial crisis. Those who have taken this view since 1973–74 have been proved wrong, and those of us who believed the market would work proved correct."[23] And Wriston's was by no means a lone voice. The Group of Thirty, an informal think tank and economic consultative group, commissioned a survey in 1981 in which bankers were asked whether they saw any risk of a "generalized debt problem affecting developing countries." Seventy-two percent of the fifty-odd banks that took part in the survey said no.[24]

The truth is that there was no definitive piece of evidence in the late

1970s or the very early 1980s to suggest that a crisis was inevitable. One could hear complaints about the construction of shopping centers in Latin America that were unlikely to generate the foreign exchange needed to repay external debt, or complaints about "Pharaonic projects" in countries like Brazil.[25] But the memory of the mid-1970s was a reason to be cheerful: petrodollar recycling in its first incarnation certainly saved many countries from recession and gave international banks what looked like a healthy way of diversifying their loan portfolios.

This debate about the risk of a debt crisis in the developing world continued, more or less inconclusively, between 1979 and 1982. Building in the background, though, was the one factor destined to end the debate: U.S. monetary tightening.

The inflation shock of 1973 had pushed capital toward developing countries because the Fed's response to it had allowed real U.S. interest rates to turn negative. The inflation shock of 1979 did the opposite, however, because of the Fed's decisive efforts to kill inflation by ensuring that real U.S. interest rates became strongly positive. This process started almost as soon as Paul Volcker arrived at the Fed as chairman in August 1979: the first monetary tightening under his watch took place at the end of his first week in office and was followed by what became known as the "Saturday Night Special" in early October, when Volcker unveiled an entirely new approach to monetary policy, imposing constraints for the first time on the U.S. money supply.[26]

While the real federal funds rate had averaged close to minus 1 percent in the years between 1973 and 1979, its average rate between 1980 and 1982 was nearly plus 4 percent. Just as negative real U.S. interest rates had pushed capital toward developing countries, their sharp rise sucked it back. When the United States was ignoring its inflation problem in the 1970s, capital inflows helped developing countries solve *their* inflation problems by enabling them to prop up their exchange rates. But when the United States tried to solve *its* inflation problem, those capital flows to developing countries dried up.

U.S. monetary tightening tipped the developing world into crisis. It raised the cost of borrowing because of the LIBOR-linked structure of most commercial loans. It resulted in an appreciation of the dollar that altered the terms of trade for U.S. trading partners. And, critically, it helped to provoke a collapse in U.S. and global economic growth, destroying the capacity of developing countries to earn dollars through exports. The United States was in recession by early 1980, and after a brief recovery fell still more deeply into recession in 1982. Global GDP growth that year was 0.4 percent. Not until 2009, during the global financial crisis, would the world economy again face such a collapse in activity.

By 1982, both borrowers and lenders were in a state of deep distress. Interest and amortization payments on external debt absorbed 50 percent of export revenues that year for the fifteen most heavily indebted countries. And the banks found themselves almost absurdly exposed to these countries. By the end of 1982, the $54 billion of developing-country loans on the books of the eight largest U.S. banks accounted for 264 percent of their capital.[27]

Borrowers in the 1970s thought they had bought protection of their own sovereignty by taking in bank loans, because these were the flows that seemed the least compromising to national autonomy. And lenders thought that extending credit in dollars at floating interest rates gave them protection because they carried neither currency risk nor interest rate risk. Both borrowers and lenders were wrong. Floating-rate debt is fine when dollar interest rates are low. But what borrowers discovered when rates rose in the early 1980s is that U.S. monetary policy could exercise a kind of tyranny over their economic fate. It took almost a decade for the developing world to recover from the crisis that followed. And it would take almost a generation for developing countries to adapt themselves to a more fundamental problem: the overwhelming influence of the U.S. Federal Reserve in their economic life.