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POLICY BRIEF

19-8 Iran Has a Slow Motion Banking Crisis

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Until fairly recently, Iran had reason to hope that its 2015 agreement to limit its nuclear programs—the Joint Comprehensive Plan of Action[1]—would help end its economic isolation and revive economic growth. That outlook has darkened since the Trump administration's move in 2018 to reimpose sanctions and wage a campaign to again isolate Iran from the rest of the world, issuing veiled suggestions that Washington favored "regime change" in Tehran. The sanctions have led to a sharp cut in Iran's oil exports, a significant fall in the value of the rial, high inflation, and a serious decline in economic activity.

Iran has been subject to a variety of external sanctions since 1979, but perhaps the most stringent were put in place in 2012 by the United States, United Nations, and European Union on account of Iran's nuclear program. Those sanctions cracked down on Iran's oil exports and imposed restrictions on Iranian banks that further cut them off from the global banking system, creating a currency crisis and a deep recession in Iran. Following an easing of sanctions after the nuclear treaty of 2015, Iran's economy was regaining some strength. But that progress was cut short when the Trump administration resumed draconian sanctions in 2018, again focusing on banning oil exports and imposing restrictions on Iranian banks.

US efforts to isolate Iran from the rest of the world have aggravated problems in the country's banking system, where a crisis has been brewing for several decades. Significant liquidity and solvency problems are posing a growing risk to Iran's financial stability. A substantial portion of banks' assets is impaired and their capital positions are very weak. These problems are the result not only of US sanctions but also of the heavy-handed role of the state, banks' often corrupt connections with various semiofficial corporations and conglomerates, and the ineffectiveness of the Central Bank of Iran (CBI) to regulate and supervise banks.

Despite the precariousness of Iran's banking system, one adversity that it has not yet experienced is a run on its banks. Given the severity of the liquidity and solvency problems that Iranian banks face and public awareness of these difficulties, one would have expected widespread bank runs and a more severe banking crisis.[2] But these runs have not yet happened, thanks to the combination of (1) strong backing of the banks by the central bank (in the form of unrestricted access to emergency liquidity assistance, a de facto deposit guarantee for all depositors, and significant regulatory forbearance) and (2) limited options available to depositors for their assets (due in part to the international sanctions).

1. Iran signed the treaty with China, France, Germany, Russia, the United Kingdom, the United States, and the European Union. The text is available at https://2009-2017.state.gov/documents/organization/245317.pdf (accessed on June 11, 2019).

2. There are various ways to define a banking crisis, often based on the conditions in the banking system or the actions taken by the government to avoid one. For example, Luc Laeven and Fabian Valencia (2018) define a banking crisis as an event that meets two conditions: (1) "significant signs of financial distress in the banking system (as indicated by significant bank runs, losses, and/or bank liquidations) and (2) significant banking policy intervention measures in response to significant losses in the banking system." However, note that under their classification a bank run is not a necessary condition for an event to be classified as a crisis.

Will these factors continue to prevent a full-blown banking crisis in the face of the recent intensification of US sanctions? A worsening of the banking crisis can probably be avoided in the short run, but banking distress will continue to mount, making the system more vulnerable to an external shock—especially if Iran's oil exports are completely halted[3] or if there is a major military confrontation with the United States—which could lead to much higher inflation and further financial difficulties.

I. WHERE DOES THE BANKING SYSTEM STAND?

The public sector dominates the Iranian banking system

Iran's banking crisis is rooted in part in heavy state involvement and controls over banks: The government effectively controls about 70 percent of the assets of the banking system.[4] The banking system has a complex ownership structure involving extensive, nontransparent interconnections with various public or semipublic institutions and corporations and weak internal controls. These features have made the system very difficult to supervise and vulnerable to mismanagement and corruption.[5]

Another important source of the problems has been the large shadow banking system made up of numerous unlicensed financial institutions (UFIs), many of which are connected to public sector entities and the armed forces. These UFIs have competed aggressively with regulated banks for deposits by offering interest rates considerably higher than the CBI's maximum interest rates paid by regulated banks. In the absence of supervision and adequate internal controls, some of the UFIs have faced difficulties (including runs on two of them in 2017), requiring the CBI to bail out depositors and merge or close many of them (IMF 2018). UFIs have since been put under CBI supervision. As a result, many of the problems with these institutions are now contained.

The situation was already bad prior to 2018

First, banks' assets are impaired. Officially, over one in ten bank loans were nonperforming, but some estimates suggest a much larger fraction. For instance, a May 2018 parliamentary report put nonperforming loans (NPLs) at about 11 percent but noted that, unofficially, they stood at 50 percent.[6,7] Loans were nonperforming for a number of reasons: the country's difficult macroeconomic conditions; pervasive government arrears to public enterprises, which in turn cannot service their bank loans; directed lending to (often zombie) public enterprises and selected economic activities;[8] and challenges in evaluating the creditworthiness of borrowers because of weak corporate governance and accounting practices.

Second, the capital position of banks is weak. Systemwide capital adequacy was 4.9 percent of risk-weighted assets in June 2017, well below the minimum ratio of 8 percent required under Basel I regulations and supervisory requirements in Iran (IMF 2018). This problem developed over several years of weak profitability in the banking system due to the high amount of NPLs, high cost of funds, and high operating costs.[9]

Third, the CBI has been actively bailing out banks by providing large liquidity injections for many years (figure 1).[10] Banks have faced chronic liquidity problems from high levels of NPLs, their holding of illiquid real estate and equity,[11] and the lack of cross-border correspondent banking and trade financing due to sanctions. The CBI's willingness to inject resources into banks through its emergency liquidity window—at high interest rates (34 percent) but without collateral—has turned it into a lender of first resort and undermined its control over monetary conditions. Monetary policy, tradi-

3. Iran's oil exports in May 2019 were estimated at 500,000 to 600,000 barrels per day.

4. Appendix A discusses the institutional structure of Iran's banking system and bank regulation in more detail.

5. As an example of the pervasive corruption, in 2011 six banks participated in fraudulent letters of credit that accounted for 24 percent of those banks' capital (Ebrahimi, Ebrahimnejad, and Rastad 2019).

6. IMF estimates placed NPLs in June 2017 at 11.4 percent (IMF 2018). The IMF has also reported a broader measure of NPLs that includes banks' illiquid assets; this second measure was 28 percent in June 2017. Provisioning for NPLs is low—only 43.6 percent of official NPLs in June 2017—partly because of the pressure to pay dividends to shareholders.

7. See www.parliran.ir/majles/fa/Content/articles/حجم-واقعی-تسهیلات-غیرجاری-بانکی-۵۰-درصد-از-کل-تسهیلات-اعطایی-است-13970301122342 ("The true volume of nonperforming loans is 50 percent of all loans") (accessed on March 6, 2019).

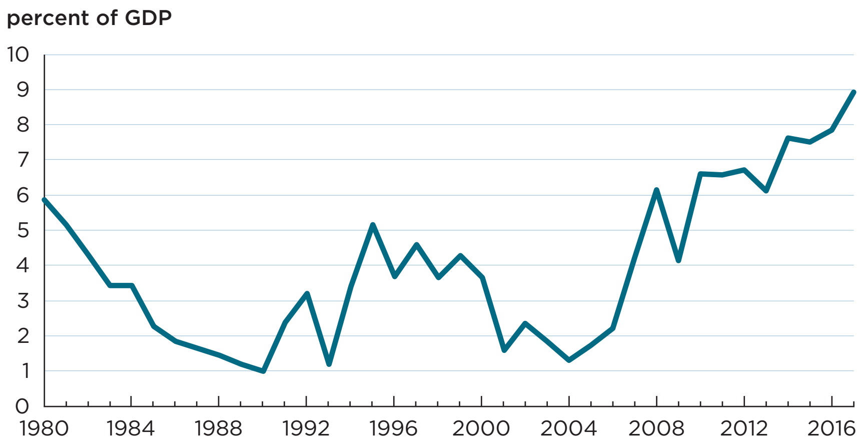
8. A prominent example of these operations has been the efforts that started in 2007 to promote low-income housing by Bank Maskan (Housing Bank). Faced with a shortage of funding, Bank Maskan had to resort to massive CBI financing, to the point that by end-2011 this financing equaled about 40 percent of base money (CBI 2018, IMF 2014).

9. Data on banks' balance sheets for 2017 are available at http://ibi.ac.ir/news/638-1396 (accessed on February 4, 2019).

10. Although banks' borrowing from the CBI has usually been for the purpose of on-lending to the government, the liquidity support they have received has recently exceeded their lending to the government.

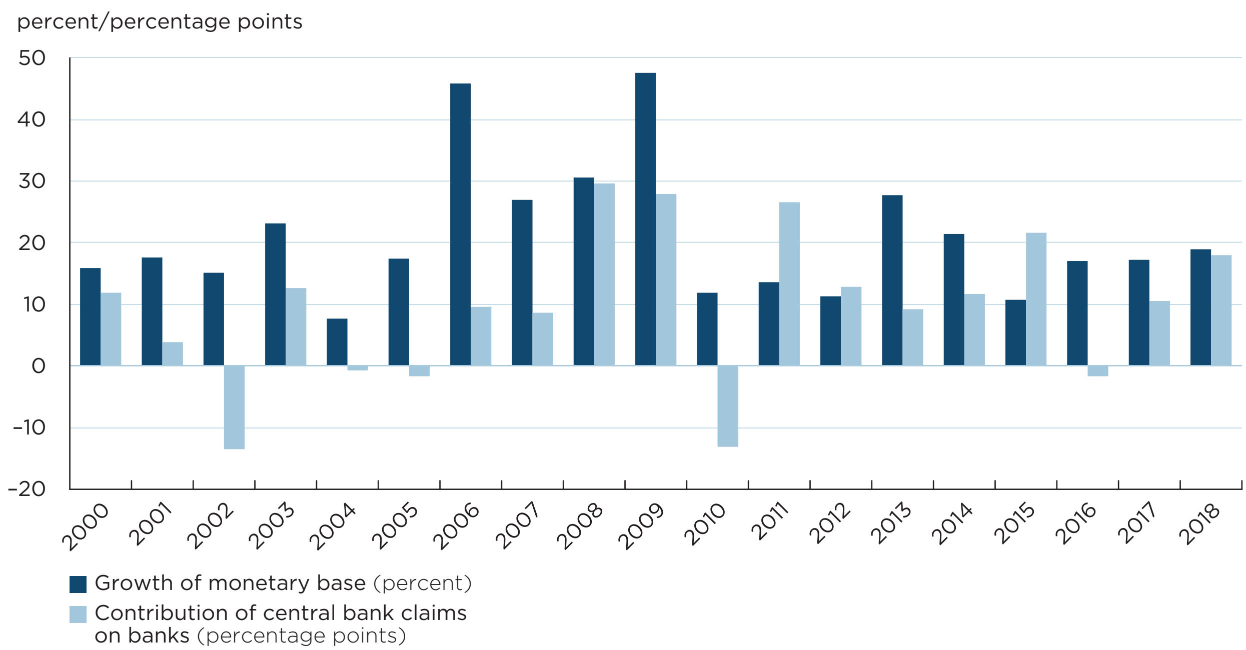
11. Banks' illiquid assets include seized collateral, banks' own investments in real estate, and unprofitable state-owned enterprises that were given to banks by the government to settle its debt to those banks.

Figure 1
Central Bank of Iran's net claims on banks, 1980–2017



Sources: Central Bank of Iran; IMF, *World Economic Outlook*.

Figure 2
Central Bank of Iran's liquidity lifeline to banks is the main contributor to growth in Iran's money supply



Note: Data are for Iranian fiscal years ending March 20.
Source: Central Bank of Iran.

tionally dominated by the needs of the government, has become increasingly guided by the liquidity needs of banks, especially private banks (figure 2).[12]

Most of the difficulties of the banking system are common knowledge

There is general awareness, both domestically and internationally, of Iranian banks' chronic balance sheet and liquidity problems. Domestically, the problems have been discussed extensively among analysts, in CBI reports, in parliamentary discussions, and on social media. Yet there is great uncertainty about the extent of the banking sector's problems, raising anxiety about issues lurking behind those

12. Private banks had the highest average NPL ratio, about 13 percent, probably because only weaker borrowers with riskier projects borrow from private banks or because they have more connected lending (Nili and Mahmoudzadeh 2014).

acknowledged in public discussions. Internationally, a wide range of observers have been ringing alarm bells about Iran's weak banking system. For instance, banking sector reform has been a primary focus of International Monetary Fund (IMF) discussions with the Iranian authorities for years, with the Fund's public reports highlighting many of the vulnerabilities discussed above.

Tough sanctions have heightened bank vulnerabilities

The severe sanctions imposed in 2012 included a partial oil embargo[13] and a freeze or restrictions on CBI's access to its official international reserves. They led to a decline in the current account surplus, an economic contraction of about 8 percent, an inflation rate of over 30 percent, and a drop in the value of the rial against the US dollar by about one half on the free market in one year (figures 3 to 6).

A key component of the 2012 sanctions was restrictions on Iranian banks that helped isolate them from the global banking system, especially by curbing transactions in US dollars, correspondent relations with foreign banks,[14] and access to the Brussels-based SWIFT[15] banking platform. These restrictions raised the cost of banking, lowered banks' income from financing international trade, and pushed some financial transactions outside the regulated banking system. The sanctions also led to an increase in NPLs,[16] both by raising the cost of production for firms dependent on foreign exchange for importing intermediate inputs, effectively interrupting their supply chains, and by weakening the government's fiscal positions and increasing its arrears to banks and public enterprises. Banks' profits were also hurt by the CBI's raising of interest rates to contain the inflation that resulted from the sharp exchange rate depreciation that followed the sanctions.[17]

The nuclear agreement in 2015 brought some reprieve to the Iranian economy and banks. The Joint Comprehensive Plan of Action provided Iran relief from both international and US secondary sanctions as the Obama administration, United Nations, and European Union lifted some sanctions.[18] A recovery in oil production and exports, a pickup in international trade and investment, and a turnaround in the economy all helped ease some of the stresses on the banking system. Also, following the Joint Comprehensive Plan of Action, the United States cut back on its efforts to persuade foreign banks not to engage with the Iranian banking system. As a result, some correspondent banking relations resumed.

But the election of Donald Trump turned the tide and sanctions were reimposed in 2018. On May 8, 2018, President Trump announced that the United States would no longer participate in the 2015 treaty and that all US secondary sanctions would be reimposed by November 4, 2018.[19] By end-2018 the SWIFT electronic payments system had disconnected Iranian banks on the US sanctions list. All of these sanctions led to further isolation of the Iranian banking system.

The US announcement of its intention to exit the Joint Comprehensive Plan of Action and the resulting anticipation of a cut in oil exports led to pressures on the rial even before new sanctions went into effect.[20] Since the end of 2017, there has been a drop of about 70 percent in the value

13. Iran's oil and gas export earnings dropped from $98 billion in 2011 to $27 billion in 2015 but rose after the signing of the Joint Comprehensive Plan of Action in July of that year. These changes in oil export revenues reflected mostly a fall in export volumes; some of the decline in oil revenues starting in 2014 was due to a drop in global oil prices.

14. The number of correspondent banks fell from 306 in 2012 to only 4 in 2014 (IMF 2016).

15. SWIFT stands for Society for Worldwide Interbank Financial Telecommunications.

16. According to IMF data, after the imposition of sanctions in 2012, banks' NPL ratio rose from 15.1 percent in March 2012 to 16.5 percent in March 2013. The subsequent decline to 11.4 percent in June 2017 was due to a sharp rise in the level of outstanding loans, not a decline in the level of NPLs.

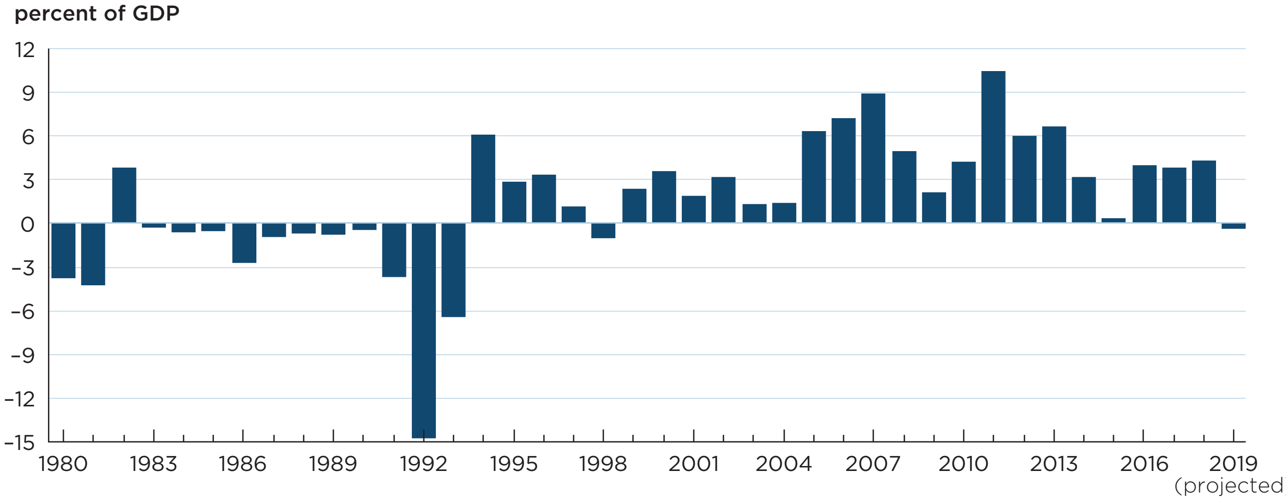
17. For example, interest rates on one-year deposits were raised from 17 to 24 percent. Keimasi, Rezaii, and Ghaffarinejad (2016) discuss the adverse impact of sanctions on Iranian banks' return on assets and on equity.

18. Certain sanctions, however, remained in place, including a general ban on US trade with Iran and Executive Order 13599 (issued in February 2012), which directed the blocking of US-based assets of all entities owned or controlled by the Iranian government, including the CBI.

19. At present, there are direct sanctions on some specific Iranian banks as well as general sanctions on transactions with Iran. There is a ban on Iran accessing the US financial system directly, but not on foreign banks or persons paying Iran for goods with US dollars. See the report from the Congressional Research Service (CRS 2019) for details on the sanctions.

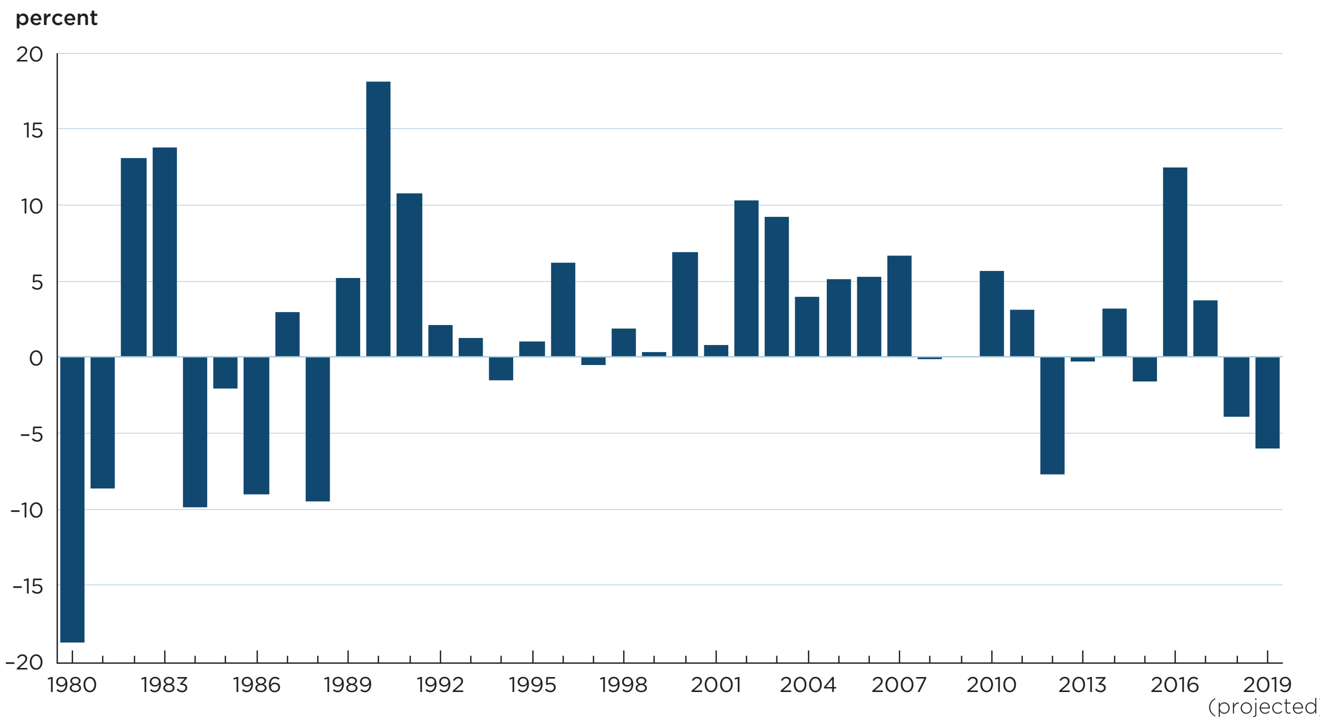
20. With the Trump era intensification of sanctions and expectations of a sharp decline or complete cutoff in oil export earnings, there was a *current account sudden stop*. The anticipation of a cut in oil exports resulted in pressures on the exchange rate and inflation, followed by a decline in economic activity. This chain of events is different from *capital account sudden stops* experienced by emerging-market countries such as Korea in 1997 and Turkey in 2000; such stops involved sharp reversals of capital flows in the context of liberalized financial systems, with attendant pressures on domestic currency and then a current account correction (Eichengreen and Arteta 2000, Reinhart and Rogoff 2009). The crisis in Iran is happening in the context of a largely closed capital account and little sovereign or private external debt.

Figure 3
Iran's current account balance, 1980–2019p



Sources: Central Bank of Iran; IMF, *World Economic Outlook*.

Figure 4
Iran's real GDP growth, 1980–2019p



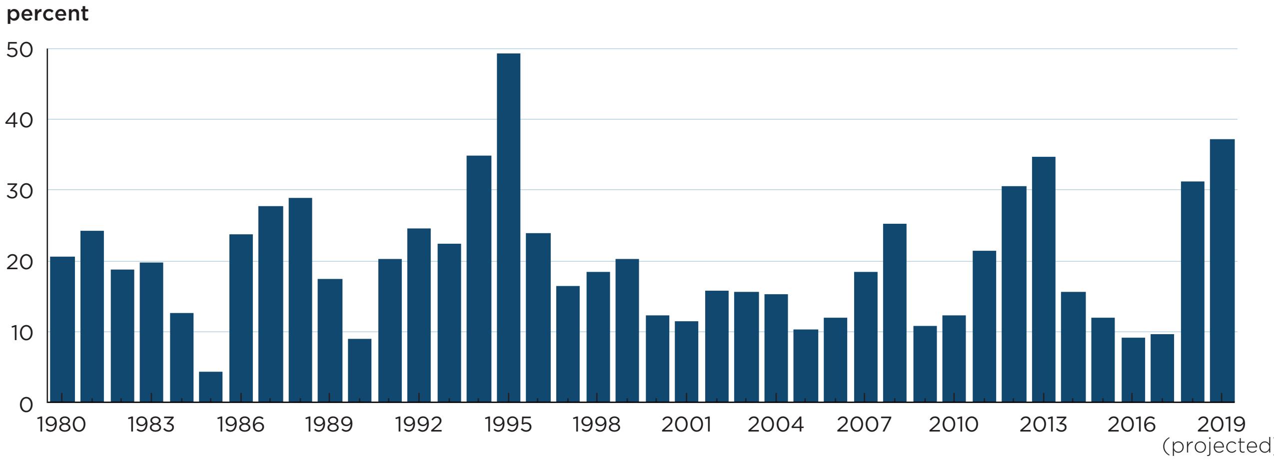
Source: IMF, *World Economic Outlook*.

of the rial against the US dollar and an increase in consumer prices by 57 percent. In 2018 there was an economic contraction of 3.9 percent in real GDP, and a decline of 6 percent is expected in 2019 (IMF 2019).

II. HOW HAS A WIDER BANKING CRISIS BEEN AVOIDED SO FAR?

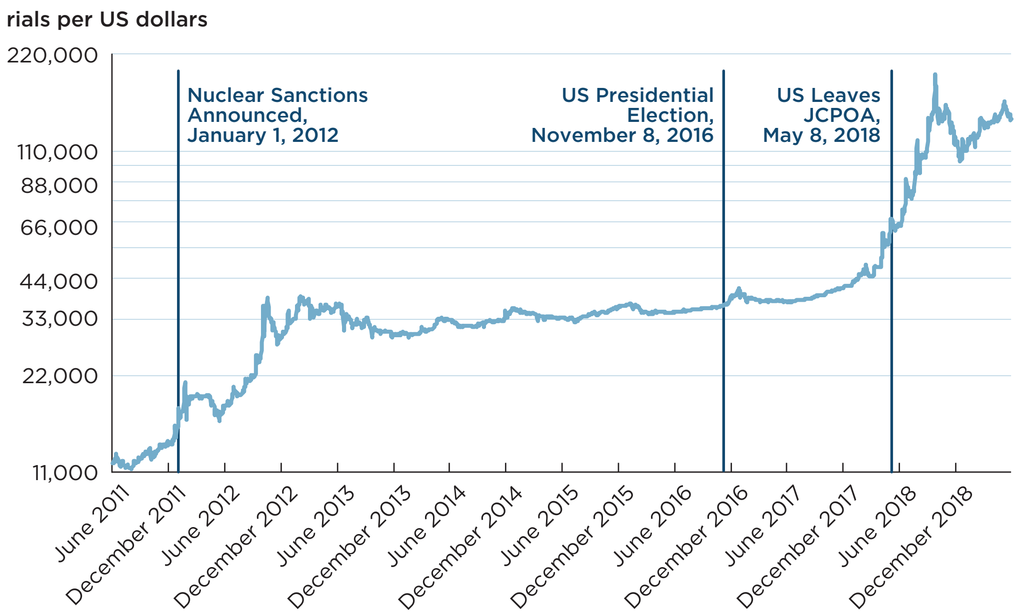
Given how vulnerable Iran's banking system is, one would have expected to see a general loss of confidence in the system and runs on deposits—perhaps first by large depositors who may not have been fully protected by deposit insurance, and then by small depositors if deposit insurance is low or incom-

Figure 5
Annual rate of inflation in Iran, 1980–2019p



Source: IMF, *World Economic Outlook*.

Figure 6
Market exchange rate of rial, June 2011–May 2019



JCPOA = Joint Comprehensive Plan of Action
Note: Logarithmic scale on y-axis.
Source: Bonbast.com.

plete. One would also have expected banks' shareholders to sell stocks in anticipation of a collapse in their value.[21] But so far, as shown in table 1, the dynamics seen during Iran's current banking crisis have been very different. A number of factors may have prevented a worsening of the crisis.

- The CBI has shown exceptional regulatory forbearance, including over UFIs, instead of pushing for bank recapitalizations and restructurings.[22] Furthermore, as

21. Claessens, and Kose (2016), Hoelscher and Quintyn (2003) and Laeven and Valencia (2018) provide surveys of some systemic financial sector crises and their resolution.

22. This forbearance does not mean the CBI has not made any efforts to improve supervision and banks' balance sheets. For example, (1) after the Joint Comprehensive Plan of Action, the central bank in 2016 pushed for the application of International Financial Reporting Standards and raising banks' capital but had to hold back once the new standards

Table 1
Have the expected dynamics of banking crises been reversed in Iran?

Actor	Benchmark response	In Iran	Impact of renewed sanctions in 2018
Central bank as regulator	Adequately **recapitalize** and **restructure** the bank to make it viable	**Regulatory forbearance** and weak classification of non-performing loans to understate problems of bank insolvency	**Increased incentive for regulatory forbearance** to retain stability of the system
Central bank as lender of last resort	Provide **emergency liquidity assistance (ELA) only to viable institutions** against **good collateral**	Provide **access to ELA without collateral**	**Increased incentive for liquidity provision** to prevent bank failures or systemic banking crisis
Large depositors	**Run first**, as not fully protected by deposit insurance	Often, **be patient**, as they (a) are state-owned enterprises or have connections to the government and the central bank, and (b) have strong incentives to maintain stability of the current financial system	**Increased patience**, as renewed sanctions have further limited access to the foreign banking system, preventing depositors from moving money abroad
Small depositors	**Run** if deposit insurance coverage is low or incomplete	Often, **be patient**, given (a) very limited number of actual bank failures, (b) limited outside options with high currency depreciation risks, and (c) limited access to alternate assets	**Increased patience** of small depositors, as depreciation of currency has made depositors shift to interest-bearing deposits and further restricted access to hard currency
Shareholders	**Sell** stocks	In some periods, **buy** more stocks, because (a) forbearance has allowed large dividend payments and (b) in the face of depreciations, a closed capital account prevents access to alternate assets	**Boost in value of bank shares** due to the depreciation of the rial when the United States withdrew from the Joint Comprehensive Plan of Action

Source: Author's analysis.

the lender of last resort, it has provided almost unrestricted access to emergency lending assistance for potentially insolvent banks without collateral, showing that it stands ready to bail out banks.

- With the repayment of nearly all depositors after runs on two UFIs in 2017, the CBI has implicitly provided a deposit guarantee that may now be seen as part of the country's financial social contract. This implicit insurance comes on top of a formal deposit insurance system whose effectiveness is very much limited by its resources and its incomplete coverage of banks.[23]
- The country's isolation from global finance has limited the scope for capital flight and dollarization. This has hindered flight out of domestic currency and kept banks' net foreign currency exposure small.
- Large depositors, who are often connected to the public sector or have limited alternative options for investments for their funds, have remained patient despite the bad health of the banking system.[24] Small depositors have also been forbearing, drawn by the high deposit rates offered by the banks and the inflation hedge that bank deposits provide relative to alternative assets available to them.
- Demand for bank stocks has remained strong, perhaps due to low perceived risk of bank failure given CBI and government backing, continued dividend payments, and limited alternative investment opportunities available (figure 7). Some of these factors came to light in a remarkable episode in 2017, after the CBI had tried

showed the difficult situation of some banks; (2) there was an increase in the capital of at least one state-owned bank in 2017, financed from revaluation gains on the CBI's foreign assets; (3) in 2018 the CBI pressured banks to sell some of their real estate holdings; (4) restrictions were imposed on the payment of dividends by some banks; and (5) 2018 saw the merger of several troubled financial institutions linked to the military and security forces.

23. The maximum size of deposits covered is about $8,000 at the current free market exchange rate.

24. Data on the size distribution of deposits are not available, but there is anecdotal evidence of the concentration of deposits in the hands of large depositors. For example, press reports in 2018 citing parliamentary sources stated that 74 percent of bank deposit amounts belong to 1 percent of depositors, and 85 percent belong to 2.5 percent of depositors.

Figure 7
Equity markets in Iran and rial exchange rate, January 2016-May 2019

Note: Logarithmic scale on the y-axis.
Sources: Tehran Stock Exchange (TSE); Bonbast.com.

in 2016 to improve accounting standards and capital adequacy. Immediately after a few banks adopted the International Financial Reporting Standards (IFRS), revealing fraud and problems with their balance sheets, their share prices collapsed and trading of those shares on the stock exchange was interrupted.[25] Yet bank stock prices soon surged broadly in line with the general stock price index. Although this surge did not match the depreciation of the rial against the dollar, it beat the rate of inflation; between the end of 2017 and May 2019, the real rates of return on the overall market index and on bank shares were 78 and 44 percent, respectively.

With the renewal of sanctions and their harsh impact on the Iranian economy, banks' liquidity and solvency positions will likely deteriorate, probably accompanied by continued regulatory forbearance and liquidity support. So, although there are occasional discussions of bank insolvencies, depositors, large and small, may still choose to remain patient. The renewal of the sanctions may thus reinforce the factors that have helped prevent a wider banking crisis. But, with or without sanctions, the situation is not sustainable for Iran's banking system.

III. DEEP REFORM OR SHORT-TERM STABILITY?

Iran now faces a choice between implementing deep and long-overdue reforms that are needed to correct the factors underlying the current banking crisis and preserving short-term financial stability.

Pursuing deep structural reforms is challenging given their complexity and the size and nature of the problems in the banking system. A durable solution will entail considerable institutional improvements, including better bank supervision and enforcement, a comprehensive review of the quality of banks' assets, and large capital injections.

In principle, bank recapitalization could be partly financed by haircuts to depositors and, in the case of private banks, by shareholders as well. More realistically, however, small depositors will need to be protected, and large depositors and bank shareholders—especially the semiofficial institutions and pension funds—will be difficult to bail in. Therefore, the government will probably have to finance recapitalizations. This could be manageable given that public debt now stands at only 40 percent of GDP (excluding the contingent liabilities of the pension system). In the "deep reform" scenario, shifting the costs of bank restructuring to the government budget may be seen as particularly conve-

25. Bank share prices may also have been affected by the uncertainties created by runs on two UFIs in the same period. Some aspects of this episode are discussed by Clawson (2018).

nient, given limited appetite for acrimonious debates about bailing in depositors and shareholders and the recent bout of depreciation and inflation, which had significant distributional consequences (although higher public debt will bring its own distributional challenges down the road).

But given the difficult economic conditions, fragile confidence in the banking system, and the complexity and costs of cleaning up the banks, the authorities are unlikely to pursue deep reform and will instead continue to focus on self-preservation with a bias toward short-term financial stability.

However, even if widespread runs and a collapse of the banking system can be avoided in the short term, the deterioration in the fundamentals of the economy—especially the recession induced by sanctions in the manufacturing sector, which relies on imported raw materials and intermediate goods—will likely lead to further decay in banks' balance sheets, making them more vulnerable to a confidence shock.

Under these conditions, the CBI will need to continue injecting liquidity into banks, setting up the country for continued high inflation. The recent attempts by the US government to cut Iran's oil exports to zero may intensify pressures on the government budget and lead to monetary financing by the CBI in the future.[26] Faced with this threat, while a reform scenario cannot be ruled out, it is more likely that the perverse dynamics described in this Policy Brief will remain entrenched as the authorities focus on self-preservation and further delay much-needed deep reforms.

26. Government policies since the reimposition of sanctions in 2018 have been relatively restrained, making a hyperinflationary episode, as seen in Venezuela, unlikely. (Hyperinflation is defined in the economics literature as an inflation rate of 50 percent per month.) The budget for fiscal year 2019/20 (Iran's fiscal year runs from March 21 to March 20) is contractionary in real terms and entails considerable cuts in salaries, pensions, and subsidies in real terms. Assuming oil exports of 950,000 barrels a day, the IMF (2019) projects a budget deficit of 4.1 percent of GDP for 2019, the same level as in 2018. Liquidity growth has also been restrained; in December 2018 (the latest official data available) the 12-month rate of liquidity growth was 22 percent.

APPENDIX A STRUCTURE OF THE IRANIAN BANKING SYSTEM

Understanding the roots of Iran's banking system difficulties and the risks they pose to financial stability requires a sense of its particular institutional setup. The banking system is a complex sector with (1) heavy state involvement and controls, (2) an ownership structure that involves significant interconnections with various public or semipublic institutions and corporations, (3) shadow banks, (4) weak internal controls, and (5) considerable shortcomings in supervisory regulations and implementation.

Regulated Banking System

Banking systems need to be understood in their political context. The Iranian revolution of 1979 was a populist revolution that aimed to address problems of corruption and maldistribution of income, among others (Mazarei 1996). It brought about not a highly centralized state but a somewhat fractious political system with competing visions and interests. Immediately after the revolution, banks, both domestic and foreign, were nationalized mainly to avert a general financial crisis and were put under an interest-free Islamic framework (IMF 2011, Turquoise Partners/Firouzeh Asia Brokerage 2016, Zahedi and Azadi 2018). At the same time, the role of banks as instruments of development and social policy became more prominent, including through specialized banks and directed credits.

About two decades after the revolution, however, as part of efforts to reform and resuscitate the economy, the banking system was partially privatized, leading to significant financial deepening (IMF 2011). New private banks were set up and several public sector banks were privatized. As a result, there are now four categories of banks: public commercial; public specialized; privatized; and private.

Because of the limited voice of shareholders of privatized banks vis-à-vis the state, those banks are de facto controlled by the government or public sector entities.[27] The ownership structure of private banks is complex, with a network of cross-ownership between banks and nonfinancial corporations and conglomerates that encourages related lending. This cross-ownership structure, nontransparent and unsupervised, has been highly vulnerable to connected lending, rent-seeking, and corruption.[28]

27. A key method of government control over the privatized banks is through its management of the shares in those banks, which were distributed to low-income households under a scheme called Social Shares. Harris (2013) provides a good review of the problems with Iran's privatization experience.

28. For example, an important private bank, the Parsian Bank, is partly owned by the major automobile producer

Despite efforts to encourage private banking, state-owned and specialized banks hold about 35 percent of the banking sector's assets—but about 70 percent if one includes privatized banks whose assets are effectively under government control.

Shadow Banks

The performance of commercial banks has been undermined by competition with a large number of unlicensed (and unregulated) financial institutions.[29] UFIs, some connected to public sector entities, the armed forces, and charities, have competed aggressively with regulated banks over deposits by offering interest rates considerably higher than those offered by regulated banks. UFIs have contributed to Iran's financial instability risks because, in the absence of adequate supervision and internal controls, many of them have faced difficulties, partly due to fraud because the CBI had no control over their ability to add to liquidity through deposit creation.

Efforts have been made since 2017 to address the rising risks from UFIs following runs on two of them; the CBI intervened, paid depositors,[30] and provided liquidity support, de facto establishing deposit insurance for UFIs. Also, steps have been taken to improve the CBI's regulatory oversight over them and allay social concerns about the safety of deposits by merging or trying to close several of them, including a few owned by the armed and security forces, and transferring their assets and liabilities to regulated banks. These steps reduced the assets held by UFIs from 25 percent of total financial system assets to 10 percent (Islamic Parliament Research Center 2017/18). As a result, risks from UFIs, while not fully eliminated, are largely contained.

Although UFIs are now in part closed or under greater CBI oversight, they harmed the profitability and balance sheets of regulated banks and weakened public confidence in the financial system and in the CBI's regulatory abilities. In addition, because of UFIs, Iranians experienced bank runs for the first time. If there is a silver lining to the experience with UFIs, it is that depositors are more aware of financial risk and regulatory problems, especially whether or not the CBI supervises a financial institution.

Regulatory Framework

Since 1983, Iranian banks' operations have been set de jure in the context of Islamic financial principles that proscribe fixed interest rate deposits and loans in favor of equity-based profit- and loss-sharing arrangements. In theory, Islamic finance could be less prone to crisis because its risk-sharing feature reduces leverage and encourages better risk management on the part of banks and their customers (El-Gamal 2006, Kammer et al. 2015).

In practice, however, banks in Iran operate very much like conventional banks. They treat loans and deposits as conventional banks do, with fixed interest rates that are not connected with the return on deposit/profit sharing. The CBI sets credit allocation guidelines and maximum deposit and lending rates, but banks do not always adhere to the interest rate ceilings.[31] In fact, the CBI has frequently changed the maximum allowable interest rates depending on macroeconomic pressures (interest rates were raised sharply after the 2012 sanctions but have remained unchanged since the reinstatement of sanctions in 2018). While banks operate similar to conventional banks, the Islamic financial framework has hindered the development of a government debt market and limited the tools available to the CBI for conducting monetary policy.[32]

Iran Khodro. Parsian was, in turn, a shareholder in the trust consortium Etemad Mobin, which was a shareholder in the Telecommunication Company of Iran (Turquoise Partners/ Firouzeh Asia Brokerage 2016).

29. At one point the institutions unlicensed by the central bank included 2,489 credit cooperatives and 3,525 religious charity funds, many of which are now inactive or being closed. The Islamic Parliament Research Center (2018) provides a critical assessment of the CBI's performance in the supervision of UFIs and of law enforcement with regard to banking violations.

30. About 99 percent of depositors, those holding deposits of less than $25,000, were paid back.

31. Interest rates have gone through three broad phases: (1) until the early 2010s, when real interest rates were generally negative and banks were channeling resources from depositors to borrowers; (2) since 2012, when real interest rates turned positive, in part to combat the impact of the nuclear sanctions on the exchange rate and prices; (3) after the reimposition of sanctions in 2018 that led to a surge in inflation and negative interest rates.

32. For instance, the Islamic financial framework has hindered the ability of the CBI to conduct open market operations, repo and reverse repo operations, or pay interest on excess reserves (Zahedi and Azadi 2018).

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