Policy Contribution
Issue n˚6 | 2017

How not to create zombie banks: lessons for Italy from Japan

Christopher Gandrud and Mark Hallerberg

MARK HALLERBERG (hallerberg@hertie-school.org) is a Non-Resident Fellow at Bruegel and professor at the Hertie School of Governance

CHRISTOPHER GANDRUD (gandrud@iq.harvard.edu), IQSS, Harvard University and Hertie School of Governance

Executive summary

JAPAN SERVES AS a cautionary tale for Italy on how to clean up banking-sector problems. A general lesson is the need for policies to forthrightly address non-performing loans (NPLs) in countries with widespread banking problems. This helps address zombie banks and sluggish economic growth.

THE JAPANESE EXPERIENCE indicates that three elements are necessary to address NPLs: (a) sufficiently capitalised banks that can take losses from NPL write-downs; (b) an independent regulator that can identify problems and force action; and (c) tools to manage the orderly disposal of NPLs.

THE PROBLEM IS not that this combination of policy tools is unknown, but that banks and governments lack incentives to use them in combination.

ITALY'S DECEMBER 2016 package providing €20 billion for recapitalisation of banks is a step in the right direction. Similarly, pressure from the European Central Bank on Italian authorities and on banks to address NPLs is welcome.

HOWEVER, POLICY TOOLS to manage and dispose of NPLs and, just as importantly, incentives to use them, are lacking. In January 2017, the European Banking Authority published a set of policy proposals for NPL resolution. Those include national and European-level public asset management companies (AMC), also known as 'bad banks'. We argue that in Italy, the incentives to use such tools and dispose of NPLs have been weak.

bruegel

Italy's banking problems

There is a growing consensus that Italy is finally taking the necessary steps to deal with its banking problems. European Union and Italian regulators have increased pressure on the country's most troubled large bank, Monte dei Paschi di Siena, to improve its balance sheet and the government issued an emergency decree on 23 December 2016 with measures to clean up the industry. The Italian Parliament approved up to €20 billion for 2017 for this government programme. While there is some scepticism that €20 billion will be enough, given that one bank alone might need almost half of the fund, the expectation is that it will help the economy – banks will begin to lend again, and this will boost investment and spending in a country that has had essentially no economic growth since the early 2000s. Will the steps Italy is planning really transform these zombie banks into healthy ones?

To understand the question and the possible answers to it, consider the root problem. Zombie banks are banks whose stocks of non-performing loans (NPLs) are not large enough to make them insolvent, but are large enough to leave the banks with a very limited capacity to make new loans to productive economic enterprises. Managing these loans can divert considerable personnel resources away from profitable lending. Zombie banks thus do not contribute positively to the wider economy. Instead they are a drag on the economy as they allocate capital to inefficient activities that created non-performing loans. Once burdened with these loans they are less likely to lend capital (European Central Bank, 2016). This can cause an 'adverse feedback loop' between the banking sector and the economy (Fujii and Kawai, 2010) as zombie banks slow economic growth and low economic growth increases the volume of non-performing loans.

We compare the situation in Italy with that in Japan almost two decades ago to illuminate the causes and effects of, and the possible solutions to, the zombie bank problem.

Both the Italian and Japanese banking systems were hobbled by NPLs. Though it is difficult to compare directly NPLs in different countries at different times because of the use of different definitions and varying supervisory stringency in enforcing those definitions, Japan's NPLs peaked at over eight percent of gross loans in 2001. Italy's are currently over 16 percent[1].

The Japanese experience suggests that three elements are necessary to tackle zombie banks. First, there needs to be a **recapitalisation** of key banks that have been identified as viable so that they can take losses from balance sheet restructuring[2]. Just because a bank has more capital does not mean that its management will have incentives to actually undertake restructuring. Second, an **independent supervisor** needs to diagnose the problem and force banks to act. Third, there needs to be a way to effectively dispose of NPLs. The public sector can play a crucial role in this respect in terms of setting up a **secondary market for NPLs** and managing their orderly disposal at non-fire sale prices.

These steps are well understood. Crucially, however, all three are necessary and bank management and policymakers need incentives to implement them in combination. In both Japan and Italy, efforts stalled at the recapitalisation stage because policymakers and most banks had few incentives to take losses from balance sheet restructuring. In the Japanese case, significant NPL restructuring did not begin until a tough independent regulator stepped in. Italy is arguably at the stage where it has the first two components in place, with recent measures to recapitalise the sector and with the European Central Bank, with no financial stake in the banks, becoming the key independent supervisor. There have been efforts to dispose of NPLs in Italy, but these have largely stalled because of weak incentives.

1 Data from FRED, https://fred.stlouisfed.org/. Accessed January 2017.

2 If one sticks with the 'zombie' analogy, another option would be to 'kill' the zombie if there is little hope of reviving its business. In many European countries there has been great political reluctance to do this however (Gandrud and Hallerberg, 2015).

The Japanese experience

For much of the post-war/pre-1990s crisis period, the preferred method of dealing with failed banks was for the Japanese Ministry of Finance to orchestrate an acquisition by a healthy bank. In the context of localised bank problems, this system successfully protected failed banks' depositors, facilitated the smooth operation of the banks and of the wider banking sector, and minimised public costs[3].

However, the fallout from the collapse of the previously booming Japanese 1980s real estate market, and the slowing economy in the early 1990s, created significant NPLs. In the face of the imminent failure of two major urban credit cooperatives – Tokyo Kyowa and Anzen Bank – in late 1994, the government changed tack and did not rely on the pure private sector acquisition model[4]. Because of the size of these institutions (they had combined deposits of 210 billion yen[5]) and the scale of their problems, no financial institution was willing to acquire them. In terms of a public-sector option, the Deposit Insurance Corporation of Japan (DICJ) was legally constrained by a 'payout limit' in terms of the amount of support it could provide to the banks. Public authorities decided that to prevent widespread panic, they should avoid imposing losses on depositors (Nakaso, 2001).

Public-private recapitalisations

It was decided to provide a mixture of public and private support to the banks. Specifically, the response to the difficulties of Tokyo Kyowa and Anzen Bank marked the start of a period of policymaking focused around public and private recapitalisations with limited balance sheet restructuring. The Bank of Japan and private financial institutions created and capitalised a new bank to assume the business of the two banks – Tokyo Kyoudou Bank. The Bank of Japan provided half of the bank's 40 billion yen capital base (Nakaso, 2001). The DICJ and private financial institutions provided further support in the form of low-interest loans. This resolution approach was termed *hougachou* – a reference to a traditional festival for raising money from the community (Nakaso, 2001).

It is important to note that the provision of assistance via Bank of Japan recapitalisations was particularly attractive to policymakers because it kept much of the support off the public balance sheet.

The *hougachou* approach was used for subsequent failed institutions in 1995. For example, Cosmo Credit Cooperative and Hyogo Bank were restructured using variations on the bridge-bank approach with large private contributions alongside liquidity and capital assistance from the Bank of Japan.

However, trouble spread from urban credit cooperatives to the main banking sector by 1997. An instructive case for understanding bank resolution in Japan in 1997-98 was the handling of internationally active Nippon Credit Bank (NCB). NCB faced funding problems and the Japanese finance ministry organised a restructuring using a modified version of the *hougachou* approach. Rather than broad financial sector contributions, the bank was recapitalised by its private stakeholders (Industrial Bank of Japan, Long Term Credit Bank of Japan and several large insurers). Of 290.6 billion yen of new capital injected, 210.6 billion came from the private sector and the rest from the Bank of Japan. As before, the accounting treatment of the Bank of Japan's assistance kept it off their balance sheet at this time. However, NCB's NPL problem was so large that its solvency was threatened despite the recapitalisation (Nakaso, 2001).

Throughout 1997-98, significant numbers of Japanese banks were assisted with support from the Bank of Japan and DICJ. The Ministry of Finance continued to attempt to address the

3 See Spiegel (1999) for a summary of notable incidents.

4 For a timeline of events from this point, see Matsubayashi (2015).

5 This was 0.05 percent of Japanese GDP based on the authors' calculations using data from the World Bank Development Indicators (http://data.worldbank.org/indicator/NY.GDP.MKTP.KN?locations=JP, accessed January 2017).

problem by arranging mergers between healthy and unhealthy banks. However, in the context of widespread bank difficulties, this strategy further contributed to financial sector weakness.

This was illustrated by the mid-1998 failure of Long Term Credit Bank of Japan (LTCB). It had been a major participant in the NCB recapitalisation the previous year. By the beginning of 1998, much of the banking sector consisted of zombie banks, muddling along with weak balance sheets, unable to appreciably restructure their balance sheets and undertake new business. Furthermore, there was a strong link between poor bank balance sheets and poor economic growth because of an adverse feedback loop in which banks with large NPL portfolios lent less, causing lower growth, which caused more NPLs. Fujii and Kawai (2010) show that, between 1993 and 2007, in years when economic growth decreased, NPLs also increased, and vice versa.

Hougachou-type efforts were too small and did not address the root NPL problem. Relying on other often weakened private banks for assistance led to consistently under-powered responses. As the assistance was in the form of recapitalisations and not combined with strong regulatory pressure or attractive NPL resolution tools, it offered no incentive to private parties or the government to address the NPL problem. Doing so would cause them to suffer losses on their investments in the immediate term. Relying on private sector recapitalisations from within Japan did not resuscitate failing banks and also spread the zombie problem to previously healthier banks.

Newly independent regulator and tools for cleaning up balance sheets

Simply recapitalising the banks did not prompt them to restructure their balance sheets. A shift happened in 1998 with the introduction of a financial regulator, the Financial Supervisory Agency (FSA). This body was independent of both the Ministry of Finance and the Bank of Japan, which were public bodies that had, through recapitalisation, a financial interest in avoiding balance sheet restructuring.[6] For example, the FSA reassessed NCB in mid-1998 and declared the bank insolvent. One result of this was that, according to the Stock Price Evaluation Committee of the newly independent Financial Reconstruction Commission, NCB's stock was worthless. This had major negative consequences for private banks and the Bank of Japan, which had provided capital the year before (Nakaso, 2001).

The independence of the regulator from fiscal authorities and the Bank of Japan appears to have been important. A regulator, such as the Ministry of Finance, which also has a financial stake in a bank, because of recapitalisation, has little incentive to expose NPL problems and write down the value of these loans. Conversely, a regulator that is independent of fiscal authorities typically has no direct incentive to engage in such 'extend and pretend' supervision.

A regulator that also has a financial stake in a bank, because of recapitalisation, has little incentive to expose NPL problems and write down the value of these loans

The regulator's aggressive re-evaluation of bank balance sheets then changed the Bank of Japan's and government's incentives when helping banks. Simply providing capital to banks to keep them afloat was no longer fiscally viable if it meant that they would lose their investments when the regulator forced the value of the NPLs to be written down.

In response to the new regulatory conditions, from March 1999 the government took a different approach to address persistent bank weakness. This involved a significant increase in public funds – to 25 trillion yen – available to recapitalise banks, with much less focus on trying to find private sector buyers in the immediate term. In addition, a new emphasis was placed on cleaning up banks' impaired balance sheets. Two initiatives – the DICJ's Housing Loan Administration Corporation and the Resolution and Collection Bank – were set up during the mid-crisis period to acquire and manage NPLs from failed institutions. Regulatory forbearance in the pre-FSA period (Fujii and Kawai, 2010) meant that many banks had not technically failed, though they were largely ineffectively conducting their credit allocation

6 Financial supervision was removed from the Ministry of Finance in June 1998 and placed in a new and independent Financial Supervisory Authority. The Financial Supervisory Agency was then restructured as the Financial Services Agency in 2000. See http://www.fsa.go.jp/en/announce/state/p20010903.html, accessed February 2017.

function. In 1999, the Housing Loan Administration Corporation and the Resolution and Collection Bank were merged into the Resolution and Collection Corporation (RCC) within DICJ. It had a new mandate to acquire and manage NPLs from both solvent and insolvent banks. The RCC is a public asset management company.

In 2002 a comprehensive Programme for Financial Revival added to these efforts. The programme involved the regulator implementing a much stricter assessment of loan quality and value. This included independent appraisals of whether or not loans were nonperforming, and a new method – discounted cash flow – for determining the value of troubled loans was implemented. This tended to account for troubled loans at a lower value than the previous method (Matsubayashi, 2015), thus removing the incentives for banks to keep NPLs on their balance sheets. The FSA introduced financial incentives for bank management to improve profitability (Matsubayashi, 2015), thus reinforcing the incentives for banks to clean up their balance sheets. Aggressive action was taken by the RCC and new Industrial Revitalisation Corporation of Japan (IRCJ) to acquire and dispose of distressed loans from banks and corporations. Matsubayashi (2015) argues that these institutions acquired assets based on information from strict assessments of their quality by the FSA, and were then mandated to sell them relatively quickly. The IRCJ, for example, had to sell its assets within three years. It successfully completed its operations on time in 2007 and was disbanded[7]. The process of acquiring non-performing loans also functioned to provide additional capital to the banks and relieved them of the distraction of managing NPLs.

In terms of incentives for policymakers, it is important to note that the asset management companies (AMCs) were structured as subsidiaries of the DICJ with the deposit insurer capitalising the AMCs[8]. Under the prevailing accounting rules this meant that the impact of AMC liabilities on the government's balance sheet were smaller than if the activities had been conducted by the Ministry of Finance directly, for example. The RCC's operations could be funded by DICJ borrowings and bond issues, which were guaranteed by the government[9]. Thus, these AMCs were largely treated as contingent liabilities on fiscal accounts. This made them relatively attractive for policymakers concerned about their fiscal position.

The combined effect of these measures was a dramatic reversal in Japanese bank balance sheets. The right panel of Figure 1 shows that recognised NPLs increased as newly independent regulators strengthened loan evaluations. NPLs then declined dramatically as AMCs acquired and disposed of them.

The stalled Italian case

Similarly, to the situation in Japan, the Italian Treasury spent more than two decades encouraging bank mergers. There was a general drive to make the Italian financial sector more competitive, which began in 1990, or prior to the completion of the single market in 1992 under the Single European Act (Polter, 2004). It is important to note changes in the composition and the regulation of the Italian banking system after 1992, as these changes inform the incentives banks and the government have to address NPL problems more recently. At the beginning of the 1990s, about 75 percent of the Italian banking sector was in public hands (Polster, 2004), and it was both fragmented and localised. A government-led initiation of banking sector

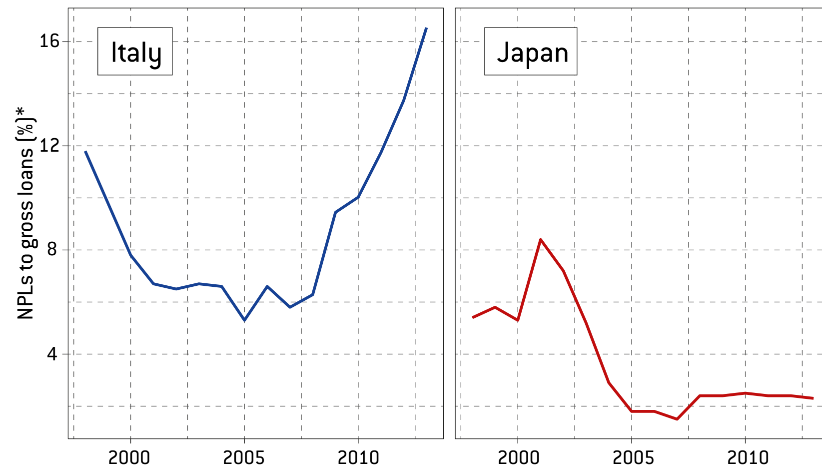
7 See http://www8.cao.go.jp/sangyo/ircj/en/index.html. Accessed in February 2017.

8 See https://www.dic.go.jp/english/e_oshirase/e_kishahappyo/e_fy2003/e_2003.4.10.html. Accessed in February 2017.

9 See http://www.dic.go.jp/english/e_kikotoha/e_zaimu/e_kozo/e_shikin-gaiyo.html. Accessed in February 2017.

reorganisation began with the Amato Law in 1990. This split publicly-owned savings banks into joint stock companies and the formally private foundations that owned them. Though in name and law they were 'private', the main players behind the foundations were sub-national governments. The Ciampi Law of 1998 intended to limit the role of the public sector by requiring the shareholdings of foundations to be reduced to less than 50 percent. Localities did not want to see their influence diminish in practice, and in some cases, they created shareholder agreements between foundations and major investors that gave the public sector significant continued influence. Nevertheless, overall, the 1990s and early 2000s were periods of consolidation in the sector.

Figure 1: Non-performing loans in Italy and Japan



Source: FRED based on World Bank Data. Note: * because of different definitions the numbers are not directly comparable.

Stress in the system arose with the decline in the general economic climate in the 2000s. Italy has experienced essentially no GDP growth since the introduction of the euro, and many of the loans banks made domestically have not been repaid. Banks and the Italian government have pursued two approaches to revitalise the sector. The first approach did not involve the public sector while the second did.

First, banks could have recapitalised themselves from private and especially international markets. This was the hope of reformers in Italy for all banks. This would involve no direct public participation. In practice, only large international banks based in Italy have this avenue open to them. UniCredit, for example, has made significant moves to restructure its balance sheet[10]. UniCredit's restructuring is intended to attract new investment as international investors have little incentive to recapitalise the bank before it takes these losses. As a major international bank, rather than a smaller community-based bank, UniCredit has the ability and willingness to attract international investment. It is also in a strong enough position to undertake significant balance-sheet restructuring to attract this investment so that it can further shore up its finances. Note that its very structure means that international market incentives drive UniCredit to dispose of its NPLs.

The second approach has applied to the vast majority of Italian banks – those we focus on in this Policy Contribution. These banks got into financial difficulties despite reforms over the past two decades. Their ownership structures were, and are, not as market-based as Unicredit, and they have not easily had access to private funding from abroad. The public sector has been used to fill this gap. As the Japanese example showed, without strong regulatory pressure and viable tools for disposing of NPLs, such banks and the government have little incentive to take action and to address underlying balance-sheet weakness, even if they are

10 See https://www.ft.com/content/5b560d6e-ec4e-11e6-930f-061b01e23655. Accessed in February 2017.

recapitalised. Similarly, in Italy in addition to recapitalisations, there have been repeated attempts to wind-down NPLs, which were largely unsuccessful.

Recapitalisation and failed NPL wind-down

Moving to concrete cases during the last two years, the government acted to assist four small Italian banks that were in trouble at the end of 2015. The government backed a plan to split their assets into a good bank and bad bank. Importantly, the private sector funded the bad bank. There was initially not enough money in the privately-funded resolution fund, so three large Italian banks (Unicredit, Intesa San Paolo and UBI Banca) made an 18-month loan to it. While the government was active in devising the plan, no public money was directly involved. These four troubled banks together were small, representing only about one percent of deposits in Italy, so it was not difficult for the government to raise the amounts needed to resolve them.

But other banks soon also required public assistance of some sort. Banca Popolare di Vicenza and Veneto Banca both needed assistance at the beginning of 2016. The government once again organised a private asset fund, the so-called 'Atlante', in April 2016, with the expectation that the private sector would pledge €4-6 billion. This fund would be used to create a securitised vehicle that could purchase €50-100 billion of NPLs[11]. The incentives for the markets to invest in this fund, however, were not compelling, and it raised only €800 million. Rather than being used for system-wide NPL restructuring, the smaller-than-expected resources under a fund now known as 'Atlante 1' were mainly used to recapitalise Banca Popolare di Vicenza and Veneto Banca[12]. In August 2016, 'Atlante 2' was created with the objective of raising another €2.4 billion that would be targeted at Monte dei Paschi di Siena (MPS). However, once again (as of November 2016) the private sector contributed much less than anticipated to 'Atlante 2', or only about €750 million[13].

The poor track record of these institutions was summarised by Atlante head Alessandro Penati: *"there is no clear vision and no strategy. . . I thought a market for Italian non-performing loans could be created but on the experience of the past six months I'm now sceptical"*[14].

At the time of writing, MPS is the most pressing case, and it shows the necessity of having all three prerequisites for addressing NPLs in place. Over the past nine years, MPS has received multiple assistance packages to recapitalise it, has found itself in multiple accounting scandals, and has had difficulties resolving its NPLs[15]. It is also much larger than those banks discussed above. In 2009, it secured an initial government recapitalisation in the form of €1.9 billion in bonds that the government purchased, so-called Tremonti bonds. The bank was scheduled to purchase them back, but only if it made a profit[16].

In 2011, MPS faced a capital shortfall according to the stress test carried out by the newly established European Banking Authority (EBA). Following the example of the Tremonti bonds, the bank issued so-called Monti bonds, which the government purchased, and which amounted to almost €4 billion. Once again, the agreement was that the bank would later buy these bonds back[17]. To address this capital shortfall, the bank also raised another €6.5 billion

11 'Italian banks: The rescue mission,' *Financial Times*, 15 April 2016.

12 See 'How Do You Solve a Problem Like Italy's Non-Performing Loans,' *Financial Times*, 27 July 2016, available at https://www.ft.com/content/fa7929fc-526c-11e6-befd-2fc0c26b3c60. Accessed in February 2017.

13 'Atlante raises €2.4bn for Italy bank loan fund,' *Financial Times*, 5 August 2016; 'UPDATE 1-Italian bank rescue fund Atlante to buy more bad loans,' Reuters, 22 November 2016.

14 See 'UniCredit pushed to €13.6bn quarterly loss by loan write-downs,' *Financial Times*, 9 February 2017, available at https://www.ft.com/content/a20dc79a-eedf-11e6-930f-061b01e23655. Accessed in February 2017.

15 Accounting schemes included 'Project Santorini' in 2008, where the bank engaged in derivatives manoeuvres with Deutsche Bank to hide losses, and 'Alexandria,' which in 2009 was a practice involving Nomura bank to hide losses that did not become public until 2012.

16 'Monte dei Paschi receives €2bn state aid,' *Financial Times*, 26 June 2012.

17 When it did so, some of these bonds were converted in equity, which contributed to the government becoming the largest shareholder in MPS in August 2016 (albeit at 4.02%). "Tesoro primo azionista di Mps, Fintech scende al 2,24% capitale." Il Sole 24 Ore. 12 August 2016.

from shareholders[18]. From the perspective of the incentives provided to the majority owners of the bank, namely a local foundation based in the bank's home city of Siena, this move was noteworthy because previously the owners resisted efforts to raise capital because new shareholders would dilute their influence[19]. However, despite these recapitalisations MPS was not able to wind down its NPL portfolio.

Increasingly stringent regulation and nascent NPL disposal tools

Recent developments, particularly increasing regulatory stringency, may be reviving the bank restructuring process in Italy

Recent developments, particularly increasing regulatory stringency, may be reviving the bank restructuring process in Italy.

One important incentive change involves the rules on accounting for bank losses. The standard is set by International Financial Reporting Standards Article (IFRS) 39. This has allowed Italian banks to avoid booking losses for NPLs that sat on their balance sheets because losses were determined when they were realised (Garrido *et al*, 2016). The rule does not incentivise cleaning up these assets because this would incur losses. IFRS 39 is being replaced by IFRS 9 from 2018. The new rule uses an expected rather than realised-loss accounting standard. While there will likely be difficulties with its implementation[20], moving to an expected rather than realised-loss standard significantly changes banks' incentives by inclining them to manage and dispose of NPLs much more actively than before.

Another important change at European Union level was the move towards a banking union, which gave significantly more power to regulators independent of national fiscal authorities. The European Banking Authority was established in 2011 to identify weaknesses in the European banking sector. The European Central Bank (ECB) in November 2014 became the single supervisor under the aptly named Single Supervisory Mechanism (SSM) for approximately the 130 largest banks in the euro area. While national supervisors are part of the decision-making process, the ECB takes the final decision for the large banks. Part of the ECB's responsibility is periodic Asset Quality Reviews, which covered all banks under its remit in 2014 and selected banks in 2016. If a bank is found to lack capital, it can apply for a 'precautionary recapitalisation' to make up the shortfall.

This procedure for recapitalisation would prove important for MPS in terms of what the government could do to assist it, but to understand why one first needs to understand one more change to the EU's governance framework and how that change affected the incentives of the various players. On 1 January 2015, the EU Bank Resolution and Recovery Directive (BRRD) came into force (albeit with a one-year transition period for the bail-in mechanism) in all the bloc's member countries, not just euro-area countries covered by the SSM[21]. The BRRD created a single rulebook for the resolution of troubled banks. It required banks to prepare their own recovery plans. It granted resolution authorities the authority to act before a bank has failed. When a bank has failed, the BRRD provides four tools: sale of the business; the creation of bridge bank; the separation of assets (which implies the creation of a 'bad bank'); and bail-in[22]. A guiding goal of the BRRD is that *"shareholders and creditors of the banks pay their share of the costs through a 'bail-in' mechanism"*[23].

The BRRD potentially changes incentives by shifting the onus of bank resolution more

18 See *Bloomberg*, 'Bank of Italy Authorizes Paschi Aid, Passing Buck to Monti', and 'Monte dei Paschi, accordo segreto tra Mussari e Nomura per truccare i conti', *Fatto Quotidiano*, 22 January 2013.

19 'World's oldest bank meets a formidable foe', *Washington Post*, 1 September 2012.

20 See *Bloomberg*, 'Primer: IFRS9 and European Banks', 13 October 2016. Available at: https://www.bloomberg.com/enterprise/blog/primer-ifrs9-european-banks/. Accessed February 2017.

21 The legal basis is Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, available at http://eur-lex.europa.eu/eli/dir/2014/59/oj.

22 The four tools are set out by Article 37(3) of the BRRD.

23 European Commission (2014) 'A single rulebook for the resolution of failing banks will apply in the EU as of 1 January 2015', press release, 31 December. Available at http://europa.eu/rapid/press-release_IP-14-2862_en.htm?locale=en.

to the private sector. During a true resolution, each of the four tools requires private-sector participation. This is obvious for private-sector acquisitions and bail-in of creditors. A bail-in equivalent of 8 percent of capital from shareholders and creditors is expected before any of the other tools are employed. The shareholders and creditors may, of course, be public or private, and some countries, such as Germany, have many public banks, but most banks are partly or wholly privately owned. The goal of a bridge bank is to stabilise a failing bank so a buyer can be found. It is possible that the buyer could be a public bank, of course, but it is not unreasonable to think that most banks looking for acquisitions are private.

Now consider how the accounting rules treat private-sector participation in these policies, and how accounting rules in turn create incentives for governments to use one tool rather than another. In general, mergers in the private sector have no direct effect on government accounts, though governments sometimes provide incentives for firms to merge. The goal of the bail-in tool is to reduce, and in many cases eliminate, the consequences of the bailout for the budget balance and the public debt by shifting the initial direct costs from the taxpayer. Crucially, this also extends to the creation of bad banks via the separation-of-assets tool. Eurostat has ruled that the bad bank would affect the government's gross debt unless there is private sector participation in the form of a 'minimal majority share' of at least 51 percent (Gandrud and Hallerberg, 2016)[24]. While the BRRD does not prohibit a majority publicly-owned bad bank, given that NPLs can be large compared to a government's normal budget or even a country's GDP, public ownership of a bad bank can increase the public debt. This is a strong disincentive for governments. On the private side, banks in a country beset by NPLs have little incentive to dedicate significant scarce resources to creating a privately-owned bad bank.

There is an additional constraint on the Italian government that deters it from undertaking balance sheet restructuring. Much junior and senior debt in Italian banks was sold to retail customers (Véron, 2016), who are also voters. A true bail-in of these debt holders would be disastrous politically.

In Italy, these constraints mean that all parties have had an incentive to avoid using policy tools that would aggressively restructure balance sheets. Though MPS failed its EBA stress test in summer 2016, the bank was judged nonetheless to be solvent, which meant that the tools to resolve a bank under the BRRD do not need to be invoked. Instead, the government could propose a precautionary recapitalisation. The governmental efforts in summer and autumn 2016 to bolster MPS once again focused on recapitalisation of the bank by the private sector. There were negotiations with the Qatar Investment Authority to contribute €5 billion, but these failed, and only about €2.5 billion was raised from the private sector. The government knew that, if there were an agreement to resolve the bank, the BRRD resolution tools would have to be used (including in particular the bail-in tool).

The government responded with an emergency decree on 23 December 2016. It appears that the current process fulfils two of our three pre-conditions for dealing with NPLs. The emergency decree authorises the government to guarantee liabilities issued by a given Italian bank, to guarantee 'emergency lending assistance' (ELA) from the Bank of Italy and to purchase bank shares directly to cover capital shortfalls that a stress test either in Italy or at the European level might identify[25]. These measures are acceptable under both the Single Resolution Mechanism Regulation and the BRRD[26]. Also in December 2016, the Italian parliament approved up to €20 billion for the year 2017 to back precautionary recapitalisations.

24 According to Eurostat, the bulk of the risks should also be with the private owners.

25 See Bank of Italy, 'Italian Government Measures to Support Bank Liquidity and Capitalisation,' *Economic Bulletin* No. 1, 23 January 2017. Note that emergency decrees must be passed within 60 days of their issuance by parliament or they expire.

26 See European Central Bank (2017) 'Opinion of the European Central Bank of 3 February on liquidity support measures, a precautionary recapitalisation and other urgent provisions for the banking sector (CON/2017/01).'

As for MPS, as of January 2017, the expectation was that the state would contribute about €6.6 billion towards its recapitalisation, while other parties would contribute another €2.2 billion[27]. So the recapitalisation appears to be in place[28].

One could also observe the power of the independent regulator. The recapitalisation of MPS was needed because the ECB ordered it. Originally the ECB required MPS to raise about €5 billion, but MPS failed to do this on its own by the deadline (Cova *et al*, 2017). This forced the Italian government to act. Moreover, the ECB decided that the amount of capital MPS needed to raise was really €8.8 billion (Merler, 2016). Under the emergency decree, any state support requires the bank that requests it to submit a capital-raising plan to the *"relevant competent authority,"* which for *"significant institutions"* is the ECB.

The remaining pre-condition for addressing NPLs is the availability of aggressive tools for their disposal. To its credit, the Italian government has recognised that a key issue facing the sector is the high level of NPLs and that something should be done to address them. The initial aim of Atlante in early 2016 was to create a vehicle to separate NPLs from bank balance sheets. The accounting restrictions relating to public participation, which would have meant that public participation of 49 percent or above would count on the government books, likely explain why the government worked actively for private-sector participation, an effort that ultimately raised less funds than expected and thus had limited impact on balance sheet restructuring.

In practice it is not easy to divide the costs of addressing bank troubles between the public and private sectors in the immediate term when there are systemic NPL problems. The pattern in Italy echoes that in Japan – that private financial institutions can be reluctant to tie-up capital during periods of systemic stress by participating in the restructuring of other troubled banks' balance sheets. Private institutions simply do not have the incentives to do this. This means the response to the need for balance sheet restructuring to resuscitate zombie banks is inadequate. There is evidence of this in the left panel of Figure 1, which shows that NPL ratios in Italy have not declined despite attempts over several years to address bank problems. Imposing costs on domestic private banks in the immediate term in these contexts can further hobble already weak banks, which harms efficient lending. Thus, while the initial intention is to limit public costs, substantial public costs can result from the poor economic growth that is a consequence of a zombie-infested banking sector. By prolonging the crisis, a focus only on private-sector restructuring can also make bank restructuring more expensive when the bill comes.

Lessons and looking forward

The Japanese and Italian cases have striking parallels that highlight the role of incentives in creating or curing zombie banks. Recapitalisations are necessary so that banks can continue during balance sheet restructuring, but recapitalisation alone is not sufficient to guarantee that the problem will be addressed. In the absence of strong independent regulatory pressure and a viable secondary market for NPLs and/or effective tools for asset management, the Japanese and Italian cases indicate that recapitalising banks will not necessarily lead them to clean up their balance sheets. In fact, if introduced alone, recapitalisations may perpetuate problems because banks and governments have few incentives to take losses from cleaning up NPLs.

Relatedly, where there are widespread NPL problems, it can be problematic for gov-

27 'Conto corrente Mps: cosa rischiano i clienti con bail-in e burden sharing', *Forexinfo.it*, 4 January 2017.

28 Though at the time of writing, the plan has not received EU approval. See *Financial Times*, 'Brussels and ECB split on Monte dei Paschi's capital proposals', 23 February 2017.

ernments to rely heavily on other banks within the same country for capital and to set up NPL-disposal tools such as AMCs. Those banks will limit their involvement, which can produce inadequate responses, and to prevent recapitalised institutions taking losses from balance sheet restructuring because this would realise losses. At the same time, the capital they do use is tied up in an unhealthy bank, rather than being lent to productive enterprises. This could even give previously healthy banks zombie-like characteristics.

The Nippon Credit Bank case is illustrative; its recapitalisation by the Japanese government and other banks, without a restructuring of the bank's balance sheet, effectively transferred the problems of one bank to others

The NCB case in Japan is particularly illustrative of the ineffectiveness of this approach. The recapitalisation of NCB by the Japanese government and other banks, without a restructuring of the bank's balance sheet, effectively transferred the problems of one bank to others. While chaotic collapse was avoided, NCB became a zombie bank and did not contribute to efficient credit allocation. The banks involved in the recapitalisation, such as LTCB, were weakened. The public and private shareholders were reluctant to restructure or close NCB, because they would have incurred losses.

We also see in both Japan and Italy the key role that an independent regulator plays in spurring more active balance-sheet restructuring. In Japan, the creation of the Financial Supervisory Agency was necessary to force the restructuring and even resolution of banks, which moved the country towards a resolution of the financial crisis.

In terms of tools for the aggressive disposal of NPLs and incentives for governments to use them, there is some movement in Europe, and more pressure from the regulator. It is welcome that the ECB began in autumn 2016 to undertake an explicit programme to address bank NPL restructuring[29]. At the time of writing, the ECB has published draft NPL guidance (ECB, 2016). The move to the IFRS 9 anticipated loss standard for accounting for NPLs is also likely to have a welcome effect in terms of incentivising banks to address NPL problems. This action is a step in the right direction, based on the Japanese experience.

What about aggressive NPL-disposal tools specifically for Italy? In January 2016, the EBA presented several proposals for NPL disposal, including options for setting up an AMC at either member state and/or European-level[30]. The proposals consider important components of such approaches, including legal obstacles to setting up AMCs, how AMCs can overcome information asymmetries between buyers and sellers, and banks' incentives to sell NPLs. The step up in regulatory pressure can also shift bank and government incentives to engage in the secondary market for NPLs. Rule changes, such as IFRS 9, can make the sale of assets at prices that private investors would be willing to pay more attractive than avoiding balance sheet restructuring.

Hopefully, these rule changes will sufficiently realign incentives, especially in the public sector, to aggressively wind down Italian NPLs. Italy might have repeated many of the mistakes Japan made in the 1990s, but with the combination of significant recapitalisation, tough independent supervision and tools with enough heft to dispose of NPLs, it can recover.

29 See https://www.bankingsupervision.europa.eu/press/pr/date/2016/html/sr160912.en.html. Accessed in February 2017.

30 See https://www.eba.europa.eu/documents/10180/1735921/The+EU+banking+sector+-+risks+and+recovery.pdf. Accessed February 2017.

References

Cova, Bruno, Eriprando Guerritore, Patrizio Braccioni, Marc-Alexandre Courtejoie and Fabio Cozzi (2017) 'Italy Issues Decree Aimed at Rescuing Troubled Banks', *Stay Current* January, Paul Hastings

European Central Bank (2016) *Draft Guidance to Banks on Non-Performing Loans*, September

Fujii, Mariko, and Masahiro Kawai (2010) 'Lessons From Japan's Banking Crisis, 1991–2005', *ADBI Working Paper Series* (222): 1–23, Asian Development Bank Institute

Gandrud, Christopher, and Mark Hallerberg (2015) 'A bank bailout lesson from Austria', *World Economic Forum*, available at: https://www.weforum.org/agenda/2015/03/a-bank-bailout-lesson-from-austria/

Gandrud, Christopher, and Mark Hallerberg (2016) 'Statistical Agencies and Responses to Financial Crises: Eurostat, Bad Banks, and the ESM', *West European Politics* 39(3): 545–64

Garrido, José, Emanuel Kopp and Anke Weber (2016) 'Cleaning-up Bank Balance Sheets: Economic, Legal, and Supervisory Measures for Italy', *IMF Working Paper* WP/16/135

Matsubayashi, Yoichi (2015) 'The Effort to Stabilise the Financial System in Japan: an Outline and the Characteristics of the Programme for Financial Revival', *Working Paper 2015/02*, Bruegel

Merler, Sylvia (2016) 'The Strange Case of the MPS Capital Shortfall', *Bruegel Blog*, 27 December, available at http://bruegel.org/2016/12/the-strange-case-of-the-mps-capital-shortfall/

Nakaso, Hiroshi (2001) 'The Financial Crisis in Japan During the 1990s: How the Bank of Japan Responded and the Lessons Learnt', *BIS Papers* No. 6: 1–82

Polster, Armin (2004) 'Italy's Savings Banks: First Reforms Create Big Universal Banks with Untapped Potential', *EU Monitor* No. 17, Deutsche Bank Research

Spiegel, Mark M. (1999) 'Moral Hazard Under the Japanese 'Convoy' Banking System', *FRBSF Economic Review* (3): 1–11

Véron, Nicolas (2016) 'Italy's Banking Problem is Serious but not Intractable', *Realtime Economic Issues Watch*, Peterson Institute for International Economics, 14 July