

RECOURSE STRUCTURE OF MORTGAGES: A COMPARISON BETWEEN THE US AND EUROPE

RON HARRIS¹ AND ASHER MEIR²

Introduction

About a quarter of US states responded to the disastrous epidemic of foreclosures in the Great Depression by limiting mortgage lenders' recourse to borrowers' non-secured assets in the case of foreclosure. A few legislated new limitations in the wake of the post-2007 mortgage crisis. Yet none of the dozens of European countries responded to similar economic conditions by imposing parallel restrictions on these so-called deficiency judgments. We point to a number of deeply rooted differences in legal and social institutions that make such a policy both less acceptable and less essential in Europe. We then suggest that changes in European attitudes towards indebtedness could make such a policy advantageous and acceptable in Europe under certain conditions.

What is a “non-recourse mortgage”

The recourse/non-recourse dimension of a mortgage determines the scope of the ability of lenders to collect upon default of the borrower. In a recourse mortgage the lender can foreclose the secured asset and also has recourse to the borrower himself, which means that the lender can also collect the debt from the borrower's unsecured personal assets and from his future income. In a non-recourse mortgage the lender is confined to the secured asset. He can foreclose, repossess the house, sell and collect the proceeds, but have no recourse, due to legal limitations that will be discussed below, to the per-

sonal assets of the borrower, or to the borrower's future income.

The non-recourse feature can be implemented on various legal levels. It can be fixed directly and expressly in the mortgage agreement, or dictated by consumer and mortgage regulation that is intended to protect borrowers. It can result from the procedural rules of debt collection, or constitute the outcome of bankruptcy law.³ Non-recourse can be a result of collection practices and policies that stop at foreclosure and do not follow defaulting borrowers personally.

In practice, most of the US states that allow only non-recourse loans do so through procedural rules.⁴ These rules can be divided into two categories. The most important procedural rules that can create de-facto non-recourse are those that directly restrict the issuing of deficiency judgments, i.e., judgments for the balance between the value of the house and the remaining loan balance.⁵ A second realm of procedural rules that provide an element of non-recourse is the one-action rule. In states that legislated the one-action rule, a lender must select one action to take against the borrower if the borrower defaults. If the lender forecloses out of court, the lender has chosen one action and may not bring a lawsuit to recover a deficiency, which would be a second action. The one-action rule appears in stronger and weaker forms in different states (Pence 2006; Kunev 2008).^{6,7}

The above discussion of the laws that can create a non-recourse mortgage demonstrates that the distinc-



³ In the US homeowners who meet the means criteria can file post-foreclosure bankruptcy under Chapter 7 of the Federal bankruptcy code, which constitutes a close parallel to a non-recourse mortgage. It enables the borrower to discharge his debt to the mortgage lender through surrendering non-exempt assets – primarily the home.

⁴ The ten states are Alaska, Arizona, California, Iowa, Minnesota, Montana, North Carolina (purchase mortgages), North Dakota, Oregon, Washington, and Wisconsin. In this classification, see Ghent and Kudlyak (2011).

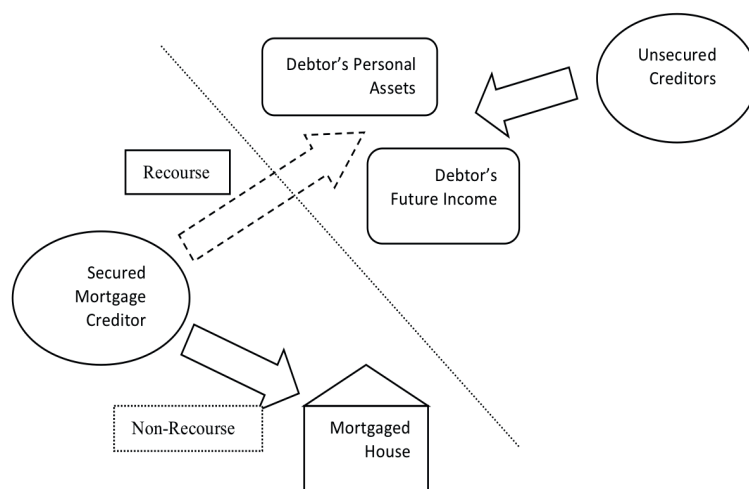
⁵ Anti-deficiency judgment rules appear in a different form in different US states. Differences are with respect to kinds of house ownerships that will be protected by the law, calculation of protected deficiency and whether deficiency judgments were prohibited altogether, or were just procedurally harder to get. For details, see Madison, Dwyer and Bender (2004).

⁶ In the strongest form, the lender initially has to choose whether to foreclose or to sue the lender personally, while in weaker forms, he has to exhaust the security before collecting from other assets or he can do both only if he chose judicial foreclosure.

⁷ In California, deficiency judgments are not allowed on purchase mortgages. On other residential mortgages, they are allowed only if the lender gives up the shorter and less expensive non-judicial foreclosure and settles for the longer and costlier judicial foreclosure.

¹ Buchmann Faculty of Law, Tel Aviv University.

² Jerusalem College of Technology.

Figure 1: The Difference between Recourse and Non-Recourse Mortgage

Note: The dashed arrow above is at the disposal of lenders of recourse mortgages but not of lenders of non-recourse mortgages. The diagonal dotted line that separates the house from the personal assets and future income represents a separation between the pools.

tion between recourse and non-recourse mortgages do not provide a binary distinction. In most jurisdictions there is no single bright line rule that brings about the non-recourse feature. A variety of obstacles exists on the way to collecting from the borrower personally. There is, in fact, a spectrum between full recourse and full non-recourse mortgage loans.

Comparison of US and European regimes

Ten to fifteen US states, including several with particularly high rates of foreclosure in the post-2007 housing crisis, are considered non-recourse states (HelocBasics 2012; Financial Samurai 2012; LoanSafe 2008; Wiki Answers 2012).⁸ Mortgage legislation in most of these states is a fascinating legacy from the 1930s, which received little attention from legal scholars and economists prior to the recent crisis (Hughes 1997). The Great Depression was accompanied by a perfect storm of underwater mortgages from the decline in housing prices, suddenly impoverished homeowners from the economic contraction, and illiquid banks calling in loans that would, under normal circumstances, have been left outstanding. Alongside Federal legislation such as the National Housing Act of 1934, many states drew their own lessons from the crisis and several eliminated or

discouraged deficiency judgments. The recent housing crisis led a few legislatures to extend existing non-recourse protection.

Let us now examine some states that are considered non-recourse states and that experienced extensive foreclosures in the recent crisis. In Arizona, lenders are prohibited from obtaining deficiency judgments following foreclosure, where the land size is 2.5 acres or less and where the property was used as a single one-family or two-family dwelling. In California, deficiency judgments are prohibited on purchase mortgages, but not on home

equity mortgages and refinancing mortgages. Nevada, another state with very high foreclosure rates, presents a remarkable case. It was considered by most classifiers as a recourse state because its procedural rules on deficiency judgments included only minor impediments. But following the mortgage crisis, the state legislature amended its rule. Loans made after 1 October 2009 by financial institutions to borrowers who continuously occupied the property as a primary residence are non-recourse (Senate Committee on Judiciary 2009).⁹

It is important to keep in mind that ultimately, most US states view mortgages as ordinary loans and make no restrictions on “deficiency judgments”, which is pursuing the debtor for the portion of the loan remaining outstanding after foreclosure. Furthermore, most US bankrupts do not obtain a de-facto exemption from deficiency judgments.

Generally speaking mortgage loans in Europe are recourse loans (European Commission 2009; Hellebrandt, Kavar and Waldron 2009; Hatchondo, Martinez and Sanchez 2013; Lucas 2011). Our research disclosed no credit market regulation and no procedural rules that bar lenders from a full recourse to the borrowers’ personal assets and future income. Heys et al. (2012, 14) found that: “There currently exists no European country which has a strong application of *datio in solutum* (non-recourse mortgage) enshrined in legislation... The only country where we

⁸ Some scholars even assert that all US residential mortgages are in practice non-recourse because of the lenient US bankruptcy regime. See also Jordan and Jain (2009) (explaining circumstances that led to global financial crisis); Feldstein (2008) (discussing inadequacies of existing proposals to disincentivise mortgage defaults); Federal Reserve Bank of Atlanta (2010) (suggesting mortgage’s status as recourse or non-recourse does not affect default rate) and Zakaria (2009) (attributing Canada’s thriving economy to its refusal to loosen regulations on its financial industry).

⁹ For other recent amendments of state foreclosure laws, see NGA Center for Best Practices (2010).

can identify a weak application of *datio in solutum* enshrined in legislation is Spain” (Heys et al. 2012). It is true that, in many jurisdictions, limitations on deficiency judgments are one kind of debt relief available for insolvent debtors (Heys et al. 2012, 143), but this is quite different from the transparent and unconditional right to fulfill the loan obligation through foreclosure, as provided for in US non-recourse jurisdictions. However, steep declines in housing prices in many European jurisdictions, declines that left millions of homeowners with negative equity, moved the possibility of introducing non-recourse mortgages onto the public agenda in some European countries.

The issue of the introduction of non-recourse mortgages has been hotly debated in Europe in recent years in countries like Ireland, Latvia, and particularly in debt ridden Spain. Spain has been the scene of a number of noteworthy developments. On the legislative level, Heys et al. (2012, 138) report that article 140 of the Spanish Mortgage law explicitly allows for non-recourse mortgages; however, they also state that these mortgages are rare in practice. In addition, there is a 2011 amendment to the Spanish Procedural Act that is meant to prevent lenders from foreclosing at an artificially low price, hence pursuing deficiency judgments when better management of foreclosure would save borrowers from these extra payments (Ashurst 2011).

On the judicial level, there was a court decision, upheld on appeal, which denied the lending bank recourse to the borrower’s income in cases where the foreclosed property was unsold and thus awarded to the bank at a low assessment, thus rendering it de facto a non-recourse loan (Legal Today 2010).¹⁰

Public policy justification for non-recourse mortgages

Non-recourse mortgages provide insurance against a unique constellation of circumstances: when the debtor has the ability to pay the debt from non-exempt assets or income but not from the value of the asset. If the borrower cannot pay from other assets, s/he will effectively be judgment proof and a default will occur, even in a

recourse mortgage regime; whereas if there is ability to collect from the house then the creditor will be repaid, even if the mortgage is non-recourse.

Such mortgages are common in commercial real-estate, but their character in the homeowner context is different and in some sense opposite. In commercial real-estate, the explicit object of the non-recourse feature is to protect the owner from the downside risk of the asset price; it is effectively a variant of limited liability, but with a fixed lien rather than a floating one. The deal is predicated on the assumption that if the value of the asset is below that of the outstanding loan, the borrower will not hesitate to fulfill her obligation through foreclosure.

In the case of homeowners, the object of the non-recourse feature is to protect borrowers from financial collapse. The deal is predicated on the assumption that borrowers will be very reluctant to give up their primary residence, which means uprooting their family from familiar surroundings, incurring significant moving costs, and in all likelihood having to change neighbourhoods. These factors make lenders confident that the non-recourse feature will be exploited only in cases of severe financial distress.

If this assumption is fulfilled, the expected number of non-recourse foreclosures will be small and, as a result, the cost premium of non-recourse loans will be minimal.

Published research tends to confirm both the assumption and the result. Field data (Chan et al. 2015)¹¹ and surveys (Guiso, Sapienza and Zingales 2013) both confirm that borrowers in non-recourse states typically give up on their homes not when the home value is slightly below the amount of the outstanding loan (“under water”), but only when the shortfall is quite large. Studies of pricing fail to show meaningful differences in mortgage prices between recourse and non-recourse states (Ghent and Kudlyak 2011).

The advantages of such “financial distress” insurance are evident. Risk is transferred to financial institutions such as banks and insurance companies, which are typically far less risk-averse than individual homeowners; furthermore, their ability to foresee, manage and hedge the risk are greater due to greater financial sophistication and large economies of scale in risk management.

¹⁰ The appeal judges concluded that the bank itself originally assessed the property at a value that covered the loan, and added that to the extent the value declined; this was largely due to the irresponsibility of the banks, thus it would be “morally unsettling” for them to use this decline as a reason to seize additional assets.

¹¹ Chan et al. (2015) review the literature on the effect of non-recourse on default rates; some studies show very modest effects even when negative equity is large.

What is the justification for public intervention to make non-recourse mortgages mandatory rather than relying on the market to provide them? Economists usually justify public intervention in the presence of either market failure or externalities. Both justifications are relevant in the case of non-recourse legislation.

Market failure

A number of distinct market failures are plausibly involved in the market for non-recourse mortgages.

Adverse selection

A relatively small number of homeowners view their purchase as a financial investment, one which they will readily part with whenever it is financially advantageous. Likewise, a relatively small number of homeowners are financially precarious when they take out a mortgage loan. Thus, if non-recourse mortgages are universal, the cost will be low and the value of the insurance against financial distress large. However, if non-recourse is optional the fraction of such “expedient” and precarious borrowers among non-recourse borrowers will be quite large, as insurance is most attractive for them. The average risk will be high, so the price will be much higher than it would be with a universal pool. As a result, average mortgage holders could be priced out of the non-recourse market and hence underinsured. The justification for universal participation in the non-recourse market is ultimately identical to that for universal participation in other kinds of social insurance such as social security, unemployment insurance, health insurance and so on.

Moral hazard as a result of asymmetric financial sophistication

The traditional moral hazard literature focused exclusively on private knowledge of the borrower/insured. It was taken for granted that the borrower knows a great deal about his likely path of earnings and expenses, or his likelihood of an accident; the lender or insurer knows much less.

In recent years there has been growing recognition that the lender or insurer also has extensive private knowledge, particularly of aggregate risks, and that these also create problems of moral hazard.

In the context of insurance, an insurer may offer insurance that is significantly overpriced compared to the actual miniscule risk of a claim; alternatively, the prospective client may underestimate the risk of a claim and be underinsured. In the context of a loan, the borrower may underestimate his likelihood of missing payments and thus incurring costly extra charges or of experiencing future privation as a result of having to repay consumption loans. In any of these cases there is a potential for regulation to improve the functioning of the market.

In the context of non-recourse loans, there are two avenues for under-insurance. One is that the borrower underestimates the *likelihood* of an adverse event, either a personal setback leading to insolvency or an economy-wide issue leading to negative equity. Another is that the borrower does not fully understand the personal costs involved, for example how wrenching the legal and economic consequences of insolvency are. In either instance, a case can be made for mandatory insurance.

The assumption in each case is that the lender, who has a high degree of financial sophistication and experience with hundreds of thousands of mortgage loans, will be able to adequately evaluate and price the risk of negative equity occurring and of the borrower wanting or needing to take advantage of the non-recourse feature.

We saw another advantage of placing downside risk on the lender in the discussion of Spain: non-recourse lenders are fully incentivized to realize the full foreclosure value of the house, whereas recourse lenders may pursue deficiency judgments, even when more prudently managed foreclosure could have made these judgments unnecessary.

Externalities

We may point to two related, but ultimately distinct types of externalities that can be improved by mandating non-recourse mortgages.

Fresh start for the individual

Financial distress primarily harms the suddenly impoverished household, but may also have significant costs for society as a whole. Many of the costs of household distress are borne by the public. Economically, over-indebted households may limit their participation in the economy, avail themselves of public support, or opt for relief provided by the bankruptcy system, which may be

more expensive. Socially, distressed households may be in danger of dissolving and losing their invaluable social bonds. This justification is parallel in many ways to the provisions in commercial bankruptcy to provide protection from creditors in cases where liquidation would prevent a firm's ability to function as a going concern. A family is also a going concern and the commonwealth has a cardinal interest in enabling its continued functioning.

Fresh start for the community as a whole

There are always individual instances of unfortunate families who are mired in debt. But historically, non-recourse statutes are debated and adopted only at times of simultaneous housing busts and widespread economic distress.¹² When most households are in a healthy economic and social situation, society as a whole can bear the cost of an occasional credit casualty. But in times of widespread distress, the benefits of a fresh start may be far greater.

Drawbacks of non-recourse mortgages

Naturally there are also countervailing considerations – market failures and externalities that are characteristic of a non-recourse regime.

Market failure

Moral hazard of borrower

As a result of protection against severe financial distress, the non-recourse borrower has an incentive to take on a larger mortgage in the first place and to exercise less prudent financial management subsequently.

Externalities

Financial stability

The fact that housing collapses tend to be economy-wide means that putting too much of the risk of a collapse on mortgage lenders can threaten financial stability at the macro level; and this threat of bank failures may be

more serious than the threat from numerous families struggling with debts.

Downward spiral of home values

Non-recourse mortgages explicitly incentivize foreclosure, which is the essence of the non-recourse option. However, it has been shown that encouraging foreclosure can trigger a vicious circle of lower home values. Foreclosures tend to lower the values of other houses in the neighborhood, which, in turn, become “submerged” (i.e., loan exceeds value), thus incentivizing further foreclosures and so on (Immergluck and Smith 2006; Moreno 1995; Simons, Quercia and Levin 1998).

Explanation of difference between US and Europe

In the wake of the worldwide depression of the 1930s, about a quarter of the 48 US states placed limits on deficiency judgments, while to the best of our knowledge, none of the approximately 35 sovereign countries of Europe did so. Considering the reason for these different responses is a necessarily speculative exercise, but by no means a futile one. We propose three deeply-rooted differences between the legal systems of the United States and continental European countries that could account for the difference.¹³

Approach to contracts

Continental legal systems take a much more rigid approach to contracts than common law. One salient example is the use of specific performance. Specific performance is much more common in continental European law, which strives to compel parties to fulfill their obligations compared to common law, which is much more inclined to assess damages and generally shuns injunctions (Szladits 1995; Romero 1986). Hence there may be a greater reluctance in Europe to release people from their promise to repay a mortgage.

Approach to insolvency:

US law generally views insolvency as an unavoidable outcome of normal risk-taking behavior, and hence as a problem that needs to be solved. A 1934 decision of

¹² Countries like the Netherlands or Denmark have very high levels of negative equity, but for various structural reasons, this has not been accompanied by high levels of financial distress, and in those jurisdictions there has been little demand for mortgage reform.

¹³ Note that in this analysis the United Kingdom is lumped culturally and legally with the United States. In effect, we are trying to explain why in the 49 jurisdictions, including 48 US states and the UK, about a quarter of them limited deficiency judgments, whereas in the approximately 35 jurisdictions on the European continent none did. Another possible basis of comparison is the total extent of negative equity, for which the rankings are similar, although not identical.

the US Supreme Court manifests these views: “One of the primary purposes of the Bankruptcy Act is to relieve the honest debtor from the weight of oppressive indebtedness, and permit him to start afresh free from the obligations and responsibilities consequent upon business misfortunes.” (Local Loan Co. vs. Hunt 1934; Williams vs. US Fidelity & Guar Co. 1915; Ziegel 2006; Sullivan, Warren and Westbrook 1989, 2001). By contrast, European law, particularly in the 1930s, generally viewed insolvency as a moral failing that needed to be sanctioned. To this day, many European jurisdictions do not provide for individual discharge, and in those that do, bankrupts often do not enjoy full legal capacity and are barred from some public offices, professions and corporate offices (Reifner et al. 2003; Niemi-Kiesiläinen and Ramsay 2003; Kilborn 2007a, 2007b, 2009).

Approach to social welfare

European countries are often seen as having a stronger commitment to social welfare, compared to the US, which places a higher emphasis on self-reliance. Hence, in Europe it might have been natural to respond to household financial hardship with the existing social safety net, whereas in the US it is more natural to seek ways to eliminate encumbrances that prevent a household from helping itself (Esping-Andersen 1990; Hall and Soskice 2001)

Hence, the European approach would tend towards three statements: you promised to pay back your mortgage loan, hence you should be obliged to do so to the best of your ability; your insolvency is a deficiency that should be punished rather than rewarded; there is no reason for the lender to come to your aid because the social safety net is ready, willing and able to do so.

An American or Anglo-Saxon approach would be much more inclined to say: you promised to pay back your mortgage loan, but insofar as you are unable to do so, there is no reason to compel you to; financial hardship is a common and normal circumstance that needs to be accounted for in public policy; excessive indebtedness is preventing the citizen from contributing to society and hence needs to be controlled.

Obviously there are overlaps between the explanations; to the extent that repaying debts is an absolute moral obligation, insolvency is likely to be viewed as a moral failing; to the extent that the social safety net is able to provide for extraordinary expenses there is less justifi-

cation for excessive spending (a large share of bankruptcies in the US are due to medical debt or student debt; while medical care and higher education are comparatively inexpensive in Europe).

Has anything changed in the last eighty years in this contrast of the two systems? The main change seems to be in the second rationale. Specific performance continues to be a common remedy in the civil law systems of Europe, and the social democratic governments of Western Europe certainly maintain their commitment to a social safety net. However, the attitude towards indebtedness has changed radically in recent decades. High levels of consumer debt, and the inevitable increased incidence of avoidable insolvency, have made insolvency a common outcome even among normative citizens, and created great pressure for legal systems to accommodate it. While the Anglo Saxon route of personal bankruptcy – a rapid and non-judgmental exemption from payments dependent only on the objective fact of insolvency – has not been adopted in Western Europe, most Western European countries have adopted insolvency systems that enable insolvent debtors to obtain release from their debts through a structured process of limited duration.

The table below shows some leading Western European nations that have adopted policies of full discharge from debts after a statutory period of meeting payments. Some countries also require debt counselling and/or a structured process of negotiation with creditors.

Table 1

European jurisdictions with discharge timetables	
Country	Length of time to de facto discharge
Austria	7 years
Belgium	5 years
Germany	6 years
Denmark	5 years
France	8 years; Starting 2016: 7 years
Sweden	5 years

Source: Heye et al. (2012).

How much of a problem is negative equity?

Even if non-recourse legislation is a good solution to the problems created by negative equity, it is unlikely to be considered if the problem itself is small. We were unable to find figures for the 1930s, but regarding the international housing crash from 2007 on, it does not

seem that the US experience has been unique internationally. “Negative equity” is not a precisely defined situation (insofar as it is impossible to know the exact selling price of any given house, and in any case, the price depends on the buying and selling decisions of other households), but in broad terms, there are many countries that reported at least ten percent of households with negative mortgage equity at some stage in the recent crisis. These include the US (peak ~13 percent), the Netherlands (peak ~30 percent), and Ireland (peak ~50 percent) (IMF 2015). Other countries with significant rates include Denmark (around eight percent) (Johnson and Flood 2014) and the UK (peak around six percent). The rates within the states of the US are highly variable, but even so, it is not clear that the very high rates are that much different from Ireland or the Netherlands. Thus, we currently have little basis to explain the difference in policy based on differing extent of experience with negative mortgage equity.

Are non-recourse mortgages a constructive policy choice for European countries?

It is impossible to evaluate the wisdom of a non-recourse mortgage policy in a vacuum. It must be considered in the context of a jurisdiction’s comprehensive consumer insolvency regime. If a large fraction of debt is mortgage debt, and in the absence of any other relief measures, non-recourse mortgages may be a very attractive source of insolvency insurance. In many countries the vast majority of households own homes and mortgages are the main source of consumer indebtedness; cutting off the ability to obtain deficiency judgments could protect a large number of families from financial distress.

If, on the other hand, much debt is not from mortgages and the overall regime provides a good measure of insurance, non-recourse mortgages may be considered a very blunt policy instrument. In times of crisis, many stricken households will not have negative equity, either because they are not homeowners, because their mortgages are mostly paid off, or because economic crisis is not accompanied by declining housing prices. Conversely, many households with no particular economic setback may be motivated to take advantage of the non-recourse provision and opportunistically unload their house to the bank simply because the outstanding balance on the mortgage happens to be above the current market price of the home.

Spain is a country that may well have benefited had a non-recourse policy been in place prior to the recent housing collapse. Spain lacks a legal framework for discharge for individuals and hence has a comparatively greater need for an ad hoc solution; the fraction of household debt devoted to mortgages is unusually high in Spain, making mortgage relief a comparatively effective instrument; and the decline in housing prices was one of the steepest (Andritzky 2014), leading to a significant fraction of “underwater” mortgages.

It is, of course, true that if a non-recourse regime had been in place prior to 2007, many people would have been denied mortgages. But in the context of crisis management – the context in which we conceive the motivation for non-recourse mortgage – this outcome would have to be considered an advantage, rather than a drawback. Banks would have been in a better position than households to evaluate the likelihood of a housing collapse, the non-recourse feature would have incentivized them to grant fewer mortgages and demand higher prices, and as a result the rise in housing prices would have been moderated in the first place and the number of insolvent families greatly reduced.

Our entire analysis does not deal with questions of emergency mortgage relief, for example the wisdom of making existing mortgages non-recourse retroactively; such questions relate to current macroeconomic policy. Here we only discuss mortgage reform, i.e., the appropriate long-term regime.

Our judgment is that, for those countries with transparent and functioning debt discharge policies, including those in the table above, compelling non-recourse mortgages will not be a constructive step. Mortgage debt is just one piece of the entire indebtedness puzzle, which those country’s insolvency regimes are well-designed to piece together, and unbundling it is likely to result in a worse outcome.

Non-recourse mortgages could be a constructive step for countries with high levels of home ownership, and insolvency regimes that are currently undeveloped and for which comprehensive reform is, for whatever reason, politically impractical.

References

- Andritzky, J. R. (2014), "Resolving Residential Mortgage Distress: Time to Modify?", *IMF Working Paper* no. 14/226.
- Ashurst (2011), Changes to the Spanish Mortgage Enforcement Regulation, https://www.ashurst.com/doc.aspx?id_Content=6164.
- Chan, S., S. Haughwout, A. Hayashi and W. Van der Klaauw (2015), *Determinants of Mortgage Default and Consumer Credit Use: The Effects of Foreclosure Laws and Foreclosure Delays*, Staff Report, Federal Reserve Bank of New York no. 732.
- Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Princeton University Press, Princeton, NJ.
- European Commission (2009), United Kingdom: Macro Fiscal Assessment: An Analysis of the December 2008 Update of the Convergence Programme, http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/20_scps/2008-09/02_technical_assessment/uk_2009-03-04_ta_en.pdf.
- Federal Reserve Bank of Atlanta (2010), Did Nonrecourse Mortgages Cause the Mortgage Crisis?, <http://realestateresearch.frbatlanta.org/rer/2010/02/did-nonrecourse-mortgages-cause-the-mortgage-crisis.html>.
- Idstein, M. (2008), "How to Help People Whose Home Values are Underwater", *The Wall Street Journal*, 18 November 2008, A21, http://belfercenter.hks.harvard.edu/publication/18681/how_to_help_people_whose_home_values_are_underwater.html.
- Financial Samurai (2012), List of Non-Recourse Mortgage Walkaway States, <http://www.financialsamurai.com/non-recourse-states-walk-away-from-mortgage> (accessed 25 September 2012).
- Ghent, A. C. and M. Kudlyak (2011), "Recourse and Residential Mortgage Default: Evidence From US States", *Review of Financial Studies* 24 (9), 3139–86.
- Guiso, L., P. Sapienza and L. Zingales (2013), "The Determinants of Attitudes Toward Strategic Default on Mortgages", *Journal of Finance* 68 (4), 1473–515.
- Hall and Soskice, eds. (2001), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford University Press, Oxford.
- Hatchondo, J. C., L. Martinez and J. M. Sánchez (2013), "Europe May Provide Lessons on Preventing Mortgage Defaults", *Regional Economist*, July.
- Hellebrandt, T., S. Kwar and M. Waldron (2009), "The Economics and Estimation of Negative Equity", *Bank of England Quarterly Bulletin*, Q2.
- HelocBasics (2012), List of Non-Recourse Mortgage States and Anti-Deficiency Statutes, <http://www.helocbasics.com/list-of-non-recourse-mortgage-states-and-anti-deficiency-statutes> (accessed 25 September 2012).
- Heys R., K. Hope, R. Ladher, M. Lane, K. Pasik, P. Ramada, M. Sinn and J. Suter (2012), *Study on Means to Protect Consumers in Financial Difficulty: Personal Bankruptcy, Datio in Solutum of Mortgages, and Restrictions on Debt Collection Abusive Practices. Final Report*, London Economics, London, http://leg.state.nv.us/75th2009/Bills/Amendments/A_AB471_R1_728.pdf.
- Hughes Jr., J. B. (1997), "Taking Personal Responsibility: A Different View of Mortgage Anti-Deficiency and Redemption Statutes", *Arizona Law Review* 39, 117–38.
- IMF (2015), IMF Country Report No. 15/1 IMF Multi-Country Report Housing Recoveries: Cluster Report on Denmark, Ireland, Kingdom of the Netherlands—the Netherlands, and Spain, <https://www.imf.org/external/pubs/ft/scr/2015/cr1501.pdf>.
- Immergluck, D. and G. Smith (2006), "The External Costs of Foreclosure: The Impact of Single-Family Mortgage Foreclosures on Property Values", *Housing Policy Debate* 17 (1), 57–79.
- Johnson S. and C. Flood (2014), "Denmark Mortgage Bonds on Cusp of 'Crisis'", *Financial Times*, online edition <http://www.ft.com/intl/cms/s/0/5c0a5a76-d202-11e3-8ff4-00144feabdc0.html#axzz3nax4lweL>.
- Jordan, C. and A. Jain (2009), "Diversity and Resilience: Lessons from the Financial Crisis", *University New South Wales Law Journal* 32 (2), 416–46.
- Kilborn, J. J. (2007a), *Two Decades, Three Key Questions, and Evolving Answers in European Consumer Insolvency Law: Responsibility, Discretion, and Sacrifice* (December 17, 2007), SSRN:<http://ssrn.com/abstract=1080252>.
- Kilborn, J. J. (2007b), "Comparative Cause and Effect: Consumer Insolvency and the Eroding Social Safety Net", *Columbia Journal of European Law* 14 (3), 563–98.
- Kilborn, J. J. (2009), "Twenty-Five Years of Consumer Bankruptcy in Continental Europe: Internalizing Negative Externalities and Humanizing Justice in Denmark", *International Insolvency Review* 18 (3), 155–85.
- Kuney, G. W. (2008), "What Your Lender and Mortgage Broker Didn't Tell You: A Call for Disclosure of Loss of the Section 580b Anti-Deficiency Protection Upon Refinancing", *Hastings Business Law Journal* 4 (2), 209–24.
- Legal Today (2010), Auto de la Audiencia Provincial de Navarra, sección 2ª, de 17 Diciembre 2010, Auto nº 111/2010 (Order of the Provincial Court of Navarra, section 2, of December 17, 2010, Order No. 111/2010), <http://www.legaltoday.com/informacion-juridica/jurisprudencia/civil/auto-de-la-audiencia-provincial-de-navarra-seccion-2-de-17-diciembre-2010>.
- LoanSafe (2008), Professor Shays, Recourse v. Non-Recourse States, <http://www.loansafe.org/forum/foreclosure-laws/4130-recourse-v-non-recourse-states.html>.
- Local Loan Co. vs. Hunt, 292 U.S. 234, 244 (1934).
- Lucas, D. (2011), *Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market*, DIANE Publishing, Collingdale, PA.
- Madison, M. T., J. R. Dwyer and S. W. Bender (2004), *The Law of Real Estate Financing*, Database Updated November 2009, § 12:69, Third Edition.
- Moreno, A. (1995), *The Cost-Effectiveness of Mortgage Foreclosure Prevention*, Family Housing Foundation, Minneapolis.
- NGA Center for Best Practices (2010), 2009 State Residential Mortgage Foreclosure Laws, <http://www.nga.org/files/live/sites/NGA/files/pdf/1001FORECLOSURELAWS2009.PDF>.
- Niemi-Kiesiläinen, I. and J. Ramsay (2003), *Consumer Bankruptcy in Global Perspective*, Hart Publishing, Oxford.
- Pence, K. M. (2006), "Foreclosing on Opportunity: State Laws and Mortgage Credit", *Review of Economics and Statistics* 88 (1), 177–82.
- Reifner, U., J. Kiesiläinen, N. Hulsand and H. Springeneer (2003), *Consumer Overindebtedness and Consumer Law in the European Union*. Final Report Presented to the Commission of the European Communities, Health and Consumer Protection Directorate-General, Brussels.
- Romero, L. J. (1986), "Specific Performance of Contracts in Comparative Law: Some Preliminary Observations", *Les Cahiers de droit* 27 (4), 785–811.
- Senate Committee on Judiciary (2009), "Revises Provisions for the Sale of Real Property", *Senate Amendment no. 728 to Assembly Bill No. 471, 75th Session*.
- Simons, R., R. Quercia and I. Levin (1998), "The Value Impact of New Residential Construction and Neighborhood Disinvestment on Residential Sales Price", *Journal of Real Estate Research* 15 (2), 147–61.
- Sullivan, T. A., E. Warren and J. L. Westbrook (1989), *As We Forgive Our Debtors: Bankruptcy and Consumer Credit in America*, New York.
- Sullivan, T. A., E. Warren and J. L. Westbrook (2001), *The Fragile Middle Class: Americans in Debt*, Yale University Press, New Haven, CT.
- Szladits, C. (1955), "The Concept of Specific Performance in Civil Law", *American Journal of Comparative Law* 4 (2), 208–34.
- Wiki Answers (2012), Which States Are Non-Recourse States for Mortgage Debt?, http://wiki.answers.com/Q/Which_states_are_non_recoursestates_for_mortgage (accessed 25 September 2012).
- Williams v. U.S. Fidelity & Guar. Co., 236 U.S. 549, 554–5 (1915).
- Zakaria, F. (2009), "Worthwhile Canadian Initiative", *Newsweek Magazine*, 2 June 2009, online edition, <http://www.newsweek.com/id/183670>.
- Ziegel J. (2006), "Facts on the Ground and Reconciliation of Divergent Consumer Insolvency Philosophies", *Theoretical Inquiries in Law* 7 (2), 299–322.