

Principles of Household Debt Restructuring

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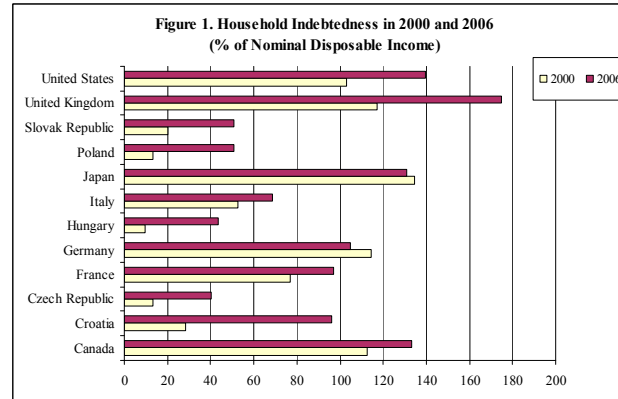
CONTENTS	PAGE
I. Introduction	3
A. Motivation for Government Intervention.....	3
B. The Case for Government Intervention.....	4
C. Design of Government Intervention in Household Debt Restructuring.....	7
D. Implementing a Government-Sponsored Debt Restructuring Program.....	10
E. Other Policy Responses.....	13
Figures	
1. Household Indebtedness in 2000 and 2006.	2
2. Household Mortgage Indebtedness in 1996 and 2006.....	2
Appendix	
1. Table 1. Cost of Bankruptcy Proceedings in Selected Economies	14
2. Brief Summaries of Previous Episodes of Household Debt Restructuring	16

I. INTRODUCTION

This note assesses the case for government intervention in household debt restructuring and presents key principles for household debt restructuring programs that could be adapted to individual country circumstances.

A. Motivation for Government Intervention

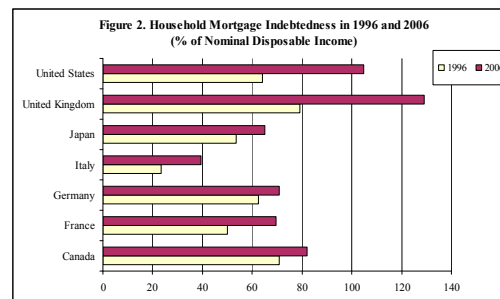
Household indebtedness has reached historically high and likely unsustainable levels in several countries hit by the current financial crisis (Figure 1). In some countries the indebtedness stems from excessive credit booms in the run up to the crisis and this has been exacerbated by recent sharp declines in house prices. In other countries, where foreign currency denominated loans are prevalent, it was also the result of a balance sheet effect triggered by currency depreciation.



Household debt overhang and debt servicing problems feed into different but connected downward spirals.² First, it weakens bank balance sheets through an increase in nonperforming loans. This in turn may lead to a reduction in credit availability which puts further pressure on house prices and prices of other asset classes. The resulting decrease in wealth and collateral value further worsen the household debt problem. Second, household debt problems can negatively impact consumption. This may turn into lower growth and higher unemployment, compressing household income and further feeding into both downward spirals.

At times of financial crises, governments often contemplate debt restructuring to deal with social problems that arise when households are no longer able to repay their loans. Such problems can be particularly pronounced when the distressed debt involves household mortgage loans (Figure 2).

While governments with fiscal space may decide to pursue restructuring policies on the basis of social considerations, the design of such debt restructuring programs should be based on sound economic principles.



² Debt overhang is a situation where a borrower's debt exceeds his/her future capacity to repay. The debt overhang problem has been analyzed for firms by Myers (1977) and for sovereign debt by Krugman (1988), among others. See Myers, S. (1977), "Determinants of Corporate Borrowing", *J. Financial Economics* 5, 147-75, and Krugman, P. (1988), "Market-Based Debt-Reduction Schemes", NBER Working Paper No. W2587.

This note assesses the case for government intervention in household debt restructuring and proposes a template for a household debt restructuring program that could be adapted to individual country circumstances.³

B. The Case for Government Intervention

It should be noted at the start that to resolve the debt overhang problem, the economy as a whole will have to bear a cost of resolution of distressed loans. The purpose of policy is to minimize the inefficiencies associated with a resolution of the problem. Any government intervention will involve distortions. However, the question is whether the benefits of intervention exceed its costs. Moreover, if intervention involves government financing, the extent of intervention should be constrained by the degree of fiscal space available and its potential negative impact on public debt sustainability.

Two sets of issues may interfere with a market driven solution and can justify a more proactive policy action than simply letting the courts and normal bankruptcy procedures, together with voluntary loan workouts, attempt to address the problem. First, a crisis affecting the household sector such as the one faced in a number of countries today, may involve a very large number of bankruptcy cases—even larger in absolute numbers than corporate sector bankruptcies. A timely resolution of such bankruptcies through the court system would not be feasible even for countries with the highest institutional capacities and the most efficient legal systems.⁴ Additionally, voluntary loan workouts can give rise to attrition problems, with delays that are optimal for the individual negotiators but not for the economy as a whole. Such delays and potential associated gridlock problems of market driven solutions, the legal costs involved, and the associated destruction of wealth call for a more “organized” resolution strategy.

Household debt restructuring can also be warranted on account of addressing externalities that arise when massive loan defaults by households result in unnecessary and costly liquidations, including foreclosures on real estate. Such problems are particularly severe when home owners possess negative equity in their homes. Although financial institutions have already initiated voluntary restructuring schemes in several countries (e.g., Mexico, Lithuania, and the United

³ The analysis does not address the weakening supply of credit or temporary liquidity problems of households, nor does it address efforts to support asset prices or banking sector resolution. The note also does not deal with complexities associated with the link between household debt and structured credit products (for example, through securitization) as in some advanced economies. A complete analysis that would address these other problems could alter the design of the debt restructuring strategy and call for additional policy measures not covered by the note.

⁴ Table 1 in Appendix 1 indicates the legal costs and time associated with typical corporate (not individual) bankruptcy proceedings in selected economies, highlighting that there is much variation in such costs across countries. This data is compiled in normal times. The noted delays would be expected to be significantly longer in the context of wide-scale corporate insolvencies associated with systemic crises. No similar data on individual insolvency proceedings is available.

States⁵) to avoid collateral execution, financial institutions will not fully internalize the negative externalities generated by such unnecessary liquidations. House prices will not stabilize as long as there is an expectation of continuing house price deflation, exacerbated by widespread foreclosures. In addition, foreclosures can have a negative effect on neighborhood values. Essentially, this can be seen as a multiple equilibria situation: in one equilibrium, debt overhang is resolved more rapidly leading to a stabilization of house prices and resumption of growth; in the other, debt overhang lingers, resulting in further declines in house prices and contributing to a worsening of the recession.

In addition to taking into account the capacity of the legal and institutional system to handle wide scale case-by-case restructurings, the case for government intervention depends on the dimension of the debt problem, both from the perspective of the debtors (households) and the creditors (banks). If the scale of distressed household debt is relatively small and/or banks are sufficiently sound, coordination problems are not overwhelming, and foreclosures are not widespread enough to create significant negative externalities, then the problem can be left to private sector borrower/creditor debt renegotiations. Box 1 summarizes some operational guidelines for assessing the scale of the problem. Government intervention is needed when both the scale of distressed household debt is sufficiently large to have macro implications and banks in distress are paralyzed by insufficient capital to absorb expected losses, lack of internal capacity to carry out individualized restructurings or by coordination failures. The capacity of the legal and institutional framework to support individualized restructurings will also be a factor informing government intervention.

Whether government intervention in the form of financial support is feasible and credible depends on its impact on public debt sustainability and the available fiscal space. When government bank recapitalization programs are also envisaged, authorities need to consider any overlap between the costs of debt restructuring and the costs of bank recapitalization when assessing the impact of government intervention on public debt. Debt restructuring, by generating write downs in asset values on banks' balance sheets, will negatively impact the capital position of banks, and will thus most likely have to be accompanied by a bank

⁵ Since the burst of the U.S. housing bubble in 2007, the U.S. federal government has introduced or sponsored several initiatives to prevent rising foreclosures, including the FHASecure program announced in August 2007 and the Hope for Homeowners (H4H) program started on October 1st, 2008. These efforts have met with only very limited success in stemming foreclosures, largely because they target severely delinquent borrowers that without more generous support will not be able to service their mortgage payments. In March 2009, the U.S. Treasury introduced a more comprehensive initiative aimed at mitigating mortgage foreclosures, the Homeowner Affordability and Stability Plan. The program establishes guidelines for affordable loan modifications and refinancing aimed at reducing monthly payments to sustainable levels and provides incentives for loan modifications for borrowers, lenders and other participants of the mortgage market, including through the personal bankruptcy mechanism as the last resort. It also includes other measures to support the housing market, including through increased funding commitments to the government sponsored agencies, renter assistance, grants for innovative local programs to reduce foreclosures and counseling for most heavily indebted borrowers.

recapitalization program. Such a recapitalization program will need to be calibrated in the amount necessary to bring the banks back to solvency after debt restructuring.

Box 1: Assessing the Size of the Problem: Some Operational Suggestions

A practical issue in deciding whether household debt restructuring may be needed is how to assess the size of the problem. This involves collecting and analyzing data on several possible dimensions of distressed household debt:

Current picture. A comprehensive assessment requires information on outstanding amounts of nonperforming (gross) household debt, both in nominal terms and in percentage of the total loan portfolio of banks, as well as data on such debt by type of credit (mortgages, credit cards, car loans, and other consumer credit), currency of denomination, amounts and number of days past due, and collateral values (accounting values according to the bank records). These stock data provide a static framing of the problem, which can be usefully compared to the broader picture of all household debt, whether performing or nonperforming. In addition, if data are available, indicators such as loan-to-value (LTV), loan-to-disposable income (LTDI), original and current debt service-to-disposable income may allow to group household borrowers according to their most current financial condition.

Evolution over time. This involves assessing the transition in credit quality for household claims in distress, i.e., how quickly household debt is moving on a deteriorating path from “watch status” to the various nonperforming categories (i.e. substandard, doubtful, and loss), based on the extent of time loans are actually overdue. The trend over time of total household debt in distress (in absolute amounts and appropriately scaled) and the evolution of the shares of debt in different credit quality categories (particularly the incidence of “loss” credits) allows an assessment of whether the problem is becoming wider and deeper, or may become so going forward, or is instead relatively stable. In addition, information on real estate prices may help to assess to what extent “negative equity” (or LTV greater than one) of mortgage loans is, or is expected to become, a problem for household borrowers and lenders. However, it should be kept in mind that the definition of nonperforming loan categories may differ somewhat across countries, and that in crisis situations with rapidly rising unemployment and falling house prices, past trends may be a poor guide for future developments.

Distribution across financial institutions. Of immediate interest, from both a financial stability and a contingent liability standpoint, is how concentrated the problem is among individual banks. Here, at least two dimensions matter. First, whether the institutions most affected are those that play a key, systemic role in the payments and settlement system, or in other key financial segments such as the interbank market, where exposures could act as a channel of further spillover effects. Second, whether the institutions affected have enough cushion, in terms of provisions, loan loss reserves and overall capitalization, in order to be able to absorb the losses involved without violating prudential capital requirements or other supervisory norms that would trigger corrective action.

Impact on financial institutions. This involves assessing the impact of restructuring strategies on the financial institutions involved. This requires, for example, evaluating the likely impact of reduced rates or lengthened maturities for distressed claims undergoing restructuring on financial institutions’ cash flows, liquidity and earnings. Similar exercises would involve assessing the impact of additional provisions on profitability and capitalization of the institutions most affected, and the dependence of their earnings on continued household debt service. These exercises are typically conducted in collaboration with banking experts, the supervisory authorities and the lending institutions involved.

This box was prepared primarily by Mauro Mecagni (SPR).

C. Design of Government Intervention in Household Debt Restructuring

When considering the extent of and nature of government intervention in household debt restructuring, two broad approaches—that are not mutually exclusive—can be envisioned.

Under the first approach, the government establishes the legal and institutional framework that supports case-by-case restructuring. If operation of the framework is sufficiently predictable, this will also catalyze restructurings that take place out of court. A reasonably effective legal system for credit enforcement, including through foreclosure, is necessary to support extension of credit in the economy and to bring debtors to the negotiating table where restructuring is warranted. However, the wealth destruction and extreme liquidity pressures that can arise in systemic crisis can be exacerbated by wide scale resort to credit enforcement measures. In particular, as discussed above, widespread foreclosure of mortgaged property can further depress house prices. It is therefore important that an effective court-supervised insolvency framework be in place for individual debtors, providing for multi-creditor restructuring through the following key legal features: (i) an automatic stay on creditor enforcement and debtor payments during the insolvency proceedings; (ii) when the debt is secured, but the market value of the collateral (including the value of the household property securing a mortgage) is below the value of the loan, the court has the power to restructure the amount of the deficiency as unsecured debt; (iii) the modification of loan terms should take into account the payment capacity of the debtor; and (iv) a “fresh start” through discharge of financially responsible debtors from the liability for unsustainable debts at the end of the liquidation or rehabilitation period.⁶

Case-by-case debt renegotiations between a creditor and debtor can result in an adjustment in loans on a voluntary basis to reduce debt payments through (i) interest rate reductions, (ii) principal amount reductions, and/or (iii) maturity extensions. These three methods of debt reduction are often mixed to improve incentives for both lenders and borrowers to participate. For example, interest rate reductions alone, while attractive for the borrower, may severely reduce the cash flow position of the lender. Maturity extensions allow such adverse impact on the cash flow of the lender to be spread over a longer period of time, thereby making interest rate reductions more affordable to the lender. In addition to putting in place the relevant legal and institutional framework, the government can play an important role in facilitating such case-by-case workouts by creating proper incentives and removing impediments for loan restructuring.

⁶ In addition, debt counseling services can be an effective tool to encourage individuals to address their debt problems at an early stage by providing individuals with professional advice on their legal rights and responsibilities and on applicable procedures for negotiation. The insolvency law can facilitate their use, by making resort to debt counseling services a condition to debtors filing for rehabilitation in insolvency proceedings. For a general discussion of key principles of individual insolvency law, see further INSOL International (2001), Consumer Debt Report, Findings and Recommendations.

For example, governments can enhance participation by supporting non-binding guidelines for private sector led restructuring.

A second approach involves the establishment of a government-sponsored debt restructuring program that involves some form of financial support. Such programs could cover a certain group of borrowers or loans, or could include all loans.⁷ Government support could come in a multitude of forms. The government could provide financial support to the banks that restructure, or it could establish a separate asset management company to purchase and resolve distressed assets. Furthermore, the government can provide direct support to the households through some form of subsidy, such as debt forgiveness, interest or exchange rate subsidies, or tax incentives.

When household debt overhang is widespread and severe, and the capacity of the banking system to restructure loans is limited, voluntary workouts that rely on a case-by-case restructuring of loans become a less attractive option, making a comprehensive debt restructuring program a more effective approach to resolve the debt overhang. At the same time, comprehensive debt restructuring programs risk being too generous by offering restructuring to borrowers that without debt restructuring would have been able and willing to make payments on their debt. Ideally, debt restructuring programs should be designed such that they lead to a “separating equilibrium” in which only borrowers that are unable to repay their debt take advantage of the program. The degree of government intervention depends on the scale of the problem, the ability of debtors and creditors to absorb losses, and the fiscal space of the government.

Any government sponsored debt restructuring program should help restore the viability of individual borrowers, while minimizing the direct fiscal cost, reducing the risk of bank failures, and establishing the basis for the recovery of the real sector. These multiple goals may not be fully compatible and policy choices may need to be made as to where the balance is struck. The design of a debt restructuring program should incorporate a number of basic features:⁸

- **Objective:** Turn troubled loans into performing loans, while mitigating the moral hazard created by offering debtors the opportunity to not repay on the loan’s original terms. The program could be directed to reduce debt service requirements of certain borrowers that have experienced increases in their scheduled loan repayments as a result of adverse

⁷ Examples of government-sponsored debt restructuring programs that targeted certain groups of loans are: the 1933 Home Owners Loan Corporation program in the U.S., the 1998 Punto Final program in Mexico, the 2000 debt restructuring program in Uruguay, the 2002 credit card debt program in Korea, and the 2008 Indymac loan modification program in the U.S. See Appendix 3 for a brief description of previous country episodes of household debt restructuring.

⁸ These basic features are designed on the model of a single (main) creditor for each household debtor and thus does not address creditor coordination and inter-creditor equity issues that would arise in countries where multiple creditors of household debtors are prevalent.

interest rate or foreign exchange rate shocks, or to address the build-up of a substantial amount of nonperforming loans.

- **Scope:** The program should, where feasible, be selective and target borrowers who cannot meet their debt service obligations but whose ability to service their debt is likely to be restored upon restructuring. The restructuring program could be designed to compensate the targeted group of borrowers either partially or in full—but in any case at a sufficient level to restore sustainable debt levels and servicing capacity of borrowers. Defining criteria for such selectivity and reliably applying the criteria could be a major challenge, especially where data is unreliable and political or social considerations are pressing factors. In cases where public funding is used, it would need to be sufficient to cover each qualifying participant. Conversely, the scope of the program would be subject to the public funding envelope.
- **Proportionality:** The degree of government intervention in the program should depend on the scale of the problem, the capacity of creditors and debtors to absorb losses, and on the fiscal space of the government. Intervention should not impede on government debt sustainability and burden sharing between creditors and debtors should depend on their ability to absorb losses.
- **Participation:** Participation should be on a voluntary basis. Banks should be induced, not forced, to restructure their debts with borrowers.⁹ Compulsory restructuring, outside of the court-supervised insolvency process will give rise to legal challenges and should be avoided.¹⁰
- **Simplicity:** Given the large number of loans involved in household debt restructuring, design should be based on simple rules and verifiable information to speed up restructuring and reduce the potential for abuse. These rules should be based on analysis of the structure of the banks' household loan portfolios, and, where it is not available already, banks will need to share with the government the necessary information to conduct such analysis should public funds be used to support the program.

⁹ However, banks' participation may be enhanced by making it mandatory for banks that receive public funds, e.g., in the context of a government-orchestrated bank restructuring program.

¹⁰ Compulsory loan restructuring programs have been rare. In the corporate debt context, Uruguay introduced a framework for compulsory restructuring of small loans in June 2000 to deal with large-scale debt overhang in the corporate sector. Under the program, loan maturities were extended under gradually increasing repayment schedules. Compulsory restructuring decreases the bargaining power of banks in the debt restructuring process, which could be beneficial in circumstances where banks, have capacity to restructure but are recalcitrant. However, the risk of legal challenge and the potential to deteriorate the credit culture likely outweigh potential benefits of compulsory restructuring.

- **Transparency and accountability:** The program should include mechanisms that allow the authorities to monitor the progress in restructuring, to ensure the accountability of the program participants, and to make adjustments to the program if necessary. Mechanisms such as ongoing reporting and audit requirements are especially important if public funds are used, as they would help safeguard the integrity of the program and the most effective use of taxpayers' money.

D. Implementing a Government-Sponsored Debt Restructuring Program

Before embarking on a government-sponsored debt restructuring program for the household sector, several factors must be taken into account, including ongoing efforts to restructure loans by banks and the dynamic impact on the quality of banks' loan portfolios. Close coordination with key market players may help to identify the need for and size of public intervention. Also, loan restructuring could set perverse incentives for borrowers going forward, negatively affecting the level of nonperforming assets. To avoid multiple rounds of debt restructuring, government-sponsored debt restructuring programs should generally not be introduced before macroeconomic policies have stabilized the economy and a bank recapitalization program has been put in place to restore the banking sector to health, taking into account prospective losses from debt restructuring. Debt restructuring should not be regarded as an instrument that can displace sound macroeconomic policies.

The advantage of a restructuring program that provides systematic loan modifications for a large pool of borrowers is that it offers a streamlined approach that can take advantage of economies of scale. This reduces coordination costs, thereby enhancing participation by a large number of banks and borrowers. At the same time, it should be realized that any debt relief generates moral hazard by offering debtors the opportunity to avoid repaying on the loan's original terms. Where possible, design should mitigate such moral hazard and lead to a "separating equilibrium" in which only borrowers that are unable to repay their debt take advantage of the program. Depending on the financial situation of households, conditions can be attached to participation in the program. These can include penalties that would present a disincentive for borrower defaults on restructured loans. For instance, borrowers may be required to allow banks to deduct direct loan repayments from their payrolls and incur the penalty of the original loan terms being restored if they default on the restructured terms. Alternatively, participation could require upfront cash payments, although such penalties may not be an option if households are already cash-strapped. Beneficiaries could also be reported to the central credit register (if this exists) as restructured borrowers, limiting the scope for new loans. Above all, the borrowers' capacity to repay has to be a key element of design.

A government-sponsored debt restructuring program may include a combination of the following additional elements:

- (i) **Incentives for borrowers.** In general, borrowers will recognize the benefit of restructuring. Government incentives may be on occasion warranted to overcome obstacles to

borrowers seeking restructuring, e.g. in cases of significant negative equity, where it may be individually efficient for borrowers to walk away from their mortgages, but costly to the economy as a whole. In such cases, the government might give incentives to borrowers to restructure loans on a voluntary basis through loan subsidies on restructured debt (such as subsidized interest rates for borrowers)¹¹, subsidized refinancing, guarantees of payments¹², subsidized write-offs, and insurance against future exchange rate or interest rate changes). For distressed mortgages, the government might also subsidize conversion of part of the debt into a more equity-like instrument, such as shared appreciation mortgages, so that repayment depends on the value of the house when sold (possibly accompanied by the government sharing in the upside).

(ii) Incentives for lenders. Government incentives may include offering tax credits for restructured loans, low interest rate credit lines to banks, or tying the restructuring to a government-sponsored bank recapitalization program.¹³ While the government may consider giving banks incentives to restructure loans by temporarily easing provisioning requirements on restructured loans, or by imposing unusually stringent provisioning on non-restructured debt, such measures are to be avoided. Experience suggests that formal forbearance may only work in the framework of a comprehensive and credible bank restructuring program that entails capital injections from bank shareholders. Nonetheless, in view of the potential for moral hazard and conflicts of interest, regulatory forbearance is risky even in the context of a bank restructuring program. Thus, banking authorities should use this resource only very cautiously and in exceptional circumstances.¹⁴

¹¹ The Punto Final program adopted by Mexico in 1998 is an example of a debt relief program that involved government subsidies to bank creditors. The program targeted mortgage holders, agribusiness, and small and medium-sized enterprises and offered large government subsidies in the form of loan discounts. The program offered rapid debt relief but at a very large cost to the taxpayer.

¹² The Homeowners Support Mortgage Scheme introduced by the U.K. Treasury in early December 2008 to reduce the number of home foreclosures offers homeowners struggling to make mortgage payments an option to defer mortgage payments and includes a government guarantee on deferred interest payments for those banks participating in the scheme.

¹³ Many countries allow their banks to upgrade restructured loans that prior to restructuring were classified as loss or doubtful into the substandard category after a new debt profile has been prepared on the basis of a more realistic repayment capacity of the borrower. After a certain number of payments on the basis of the new schedule have been made (international practices vary between 6 to 12 monthly payments), such restructured loans can often be upgraded further.

¹⁴ While not best-practice, some countries have eased provisioning requirements when faced with a surge in nonperforming loans. For example, when faced with rising delinquencies on credit cards in 2002, Korean authorities allowed credit card issuers to roll over delinquent credit card loans, a practice known as “re-aging”, to ease the burden of provisions and charge-offs of these loans for issuers. Similarly, authorities in Taiwan POC when faced with a distressed credit card market in 2005, allowed restructured loans to be reclassified as performing, effectively granting credit card issuers regulatory forbearance.

(iii) Legal and institutional reforms. The utility of a debt restructuring program is increased where backed up by an effective legal, institutional and regulatory framework for the enforcement of creditor rights. In particular, an effective personal bankruptcy framework for addressing collective enforcement of creditor claims and rehabilitation of debtors may also be useful where multiple creditors are present. While use of such credit enforcement tools on a case-by-case basis would not be feasible to resolve large scale defaults on household debt that may arise in a systemic crisis, the credible threat of their use as a last resort is important to set markers for the behavior of debtors and creditors.

(iv) Specific measures to address loans denominated in foreign currency. When distressed household debt is largely denominated in foreign currency, consideration could be given to converting the debt into local currency. However, such conversion gives rise to a number of problems. In principle, local-currency conversion eliminates borrowers' exposure to exchange rate flexibility, though its effects on the banking system will be country specific and depend on the net open currency positions of financial institutions. That said such conversion is likely to be prohibitively expensive for the banks and their borrowers, especially in systems with high levels of foreign currency denominated loans, unless its costs are transferred to the government.¹⁵ In addition, local-currency conversion may have adverse side effects on foreign exchange markets as lenders demand foreign currency to rebalance their portfolios. Then, for conversion to be an option, the foreign currency mismatch at financial institutions needs to be solved first, and this requires the availability of foreign currency-denominated liquid assets. Public support could be granted to banks in the form of dollar-denominated or indexed restructuring bonds to reduce the currency mismatch that arises on banks' balance sheets after loans are converted into local currency, though the feasibility of such bonds depends on country circumstances, including the degree of dollarization of the economy¹⁶. In particular, such bonds may not be sufficiently liquid to resolve funding problems at banks. In any case, forced conversion—e.g. through legislative fiat—should be avoided.¹⁷ Such forced conversion would

¹⁵ In November 2008, Hungarian commercial banks – faced with increased credit risk of their loan portfolios denominated in foreign currency due to a sharp depreciation of the local currency—signed a gentleman's agreement with the ministry of finance on a foreign-currency loan workout program that includes the option to convert foreign currency loans into forint-denominated loans. The conversion part of the program has thus far not been taken up by borrowers because of the perceived cost of conversion implied by domestic interest rates that are much higher than interest rates on foreign currency loans.

¹⁶ Such foreign-currency denominated restructuring bonds have been used before in Bulgaria (1994, 1997, 1999), Korea (1998), Mexico (1995-96), Poland (1991), and Uruguay (1982-84), while foreign-currency indexed restructuring bonds have been used in Indonesia (1998-2000) and Nicaragua (2000-01). However, in all these countries, these bonds have been issued as part of more general bank restructuring programs rather than household debt restructuring programs. See Hoelscher (2006), "Bank Restructuring and Resolution", IMF, for further details.

¹⁷ The 2002 Argentine asymmetric pesofication is an example of a forced debt conversion program that imposed significant losses on banks and depositors, with profound negative implications for financial intermediation and economic growth going forward. The program started with an external debt moratorium, an end to convertibility of the local currency, and the introduction of a dual exchange regime. A month later, the exchange regime was unified,

(continued)

give rise to legal challenges, may lead to a run on the currency as banks try to rebalance their portfolio, and would undermine the overall credit worthiness of a country.

(iv) Administrative measures as last resort. If the size of the debt problem is overwhelming and other tools, including government financial support, are ineffective, administrative measures may become a last resort. Such measures include the imposition of a standard way of modifying distressed loans (possibly differentiated according to local market conditions) and a payment moratorium or foreclosure ban on distressed loans. A debt payment moratorium is particularly problematic because it interferes with contracts, negatively impacting the market's perception of the quality of contract enforcement going forward, and would not address underlying debt overhang problems. Similarly, the imposition of an administrative ban on foreclosures does not solve the underlying debt overhang problems and could generate incentives to default by reducing the associated penalty, thereby exacerbating spillover effects on bank balance sheets. Other administrative measures, such as deposit freezes or the imposition of capital controls should be avoided when possible, given the high economic costs they impose on future financial intermediation.

E. Other Policy Responses

Government sponsored debt restructuring programs are only one mechanism to restructure household debt. The key advantage of such programs is simplicity and speed—recognizing loan losses up front thus providing immediate relief to borrowers. At the same time, debt restructuring does not directly impose losses on borrowers, thus posing incentive problems, including moral hazard. These, however, can be mitigated to some degree by targeting a select group of borrowers and through burden sharing with borrowers.

In addition to a government-sponsored debt restructuring program, household debt restructuring may also be facilitated indirectly through mechanisms supporting the financial health of banks such as: (i) recapitalizations and (ii) government purchases of distressed loans¹⁸, for example by transferring distressed loans to asset management companies (AMCs) better equipped to resolve these loans. A positive feature of recapitalization is that—depending on its political support—it can be more selective in terms of bank-specific public support, and be based on the strength of the financial institution taking into account prospective losses resulting from the resolution of distressed assets. The transfer of distressed loans to an asset management company may facilitate

and bank balance sheets were dedollarized at asymmetric rates and indexation, imposing large losses on both banks and depositors.

¹⁸ An example of a government program that involved government purchases of distressed loans is the U.S. Home Owners Loan Corporation (HOLC) established to in 1933. To prevent mortgage foreclosures, HOLC bought distressed mortgages from banks in exchange for bonds with federal guarantees on interest and principal. It then restructured these mortgages to make them more affordable to borrowers and developed methods of working with borrowers who became delinquent or unemployed, including job searches.

household debt restructuring (while providing incentives to banks to recognize losses). However, such transfers are not without problems, including the risk of transferring assets at above market prices, thus bailing out existing bank shareholders, offering support beyond that necessary to restore the debt viability of borrowers, and political and legal challenges in asset resolution. The experience with asset management companies has been mixed and their success depends largely on the legal and institutional environment.¹⁹

Countries typically apply a combination of these resolution strategies—with some more directed toward financial institutions and others more geared towards borrowers—and in the process often incur substantial fiscal costs.²⁰ The mix of policy responses will ultimately be crisis specific and depend on a variety of factors, including the nature and depth of the financial crisis, and specific country circumstances.

¹⁹ While a detailed analysis of pros and cons of using an AMC as a debt restructuring tool goes beyond the scope of this note, in addition to valuation of the assets to be transferred, other key issues that need to be addressed in setting up and operating an AMC include: (i) whether the AMC is fully financed by the government or through a combination of government and other (e.g., official and private sector) financing; (ii) risk/loss sharing arrangements if the AMC has more than one shareholder; and (iii) governance/decision making structure of the AMC.

²⁰ For a more extensive overview of how crises resolution policies have been used in past financial crises and the tradeoffs involved, see Hoelscher and Quintyn (2003), “Managing Systemic Financial Crises”, IMF Occasional Paper and Honohan and Laeven (2005), “Systemic Financial Crises: Containment and Resolution”, Cambridge University Press.

Table 1. Cost of Bankruptcy Proceedings in Selected Economies

Country	Time (years)	Cost (% of estate)	Recovery rate (cents on the dollar)
Argentina	2.8	12.0	29.8
Austria	1.1	18.0	71.5
Brazil	4.0	12.0	17.1
Bulgaria	3.3	9.0	32.1
Estonia	3.0	9.0	37.5
France	1.9	9.0	44.7
Germany	1.2	8.0	52.2
Hungary	2.0	15.0	38.4
Iceland	1.0	4.0	76.6
Italy	1.8	22.0	56.6
Japan	0.6	4.0	92.5
Latvia	3.0	13.0	29.0
Lithuania	1.7	7.0	48.0
Romania	3.3	9.0	29.5
Spain	1.0	15.0	73.2
Sweden	2.0	9.0	75.1
Thailand	2.7	36.0	42.4
Turkey	3.3	15.0	20.2
Ukraine	2.9	42.0	9.1
United Kingdom	1.0	6.0	84.2
United States	1.5	7.0	76.7

Note: This table summarizes weaknesses in existing corporate bankruptcy law and the main procedural and administrative bottlenecks in the bankruptcy process. The indicators include: average time to complete a procedure, cost of the bankruptcy proceedings, and the recovery rate, which calculates how many cents on the dollar claimants (creditors, tax authorities, and employees) recover from an insolvent firm. Data are based on a prototype firm (a hotel) and refer to bankruptcy proceedings for firms rather than households. Source: 2009 World Bank Doing Business Database.

Brief Summaries of Previous Episodes of Household Debt Restructuring²¹

A. United States (1933)

In 1933, at the onset of the U.S. Great Depression, the Home Owners Loan Corporation (HOLC) was established to prevent mortgage foreclosures. HOLC bought distressed mortgages from banks in exchange for bonds with federal guarantees on interest and principal. It then restructured these mortgages to make them more affordable to borrowers and developed methods of working with borrowers who became delinquent or unemployed, including job searches. Eligible mortgages include mortgages with an appraised value of US\$20,000 or less (US\$321,791 in 2008 dollars). Approximately 40 percent of those eligible for the program applied and half of these applications were rejected or withdrawn. Of the one million loans HOLC issued, it acquired 200,000 homes from borrowers who were unable to pay their mortgages. HOLC ended up making a relatively small profit when it was liquidated in 1951, in part because declining interest rates and the government guarantee allowed it to borrow inexpensively.

B. Mexico (1998)

Following the unsuccessful FOBAPROA bank restructuring program initiated in 1995, the government of Mexico initiated in December 1998 the Punto Final program, which was a government-led debt relief program targeted at mortgage holders, agribusiness, and small and medium-sized enterprises. The program offered large subsidies (up to 60 percent of the book value of the loan) to bank debtors to pay back their loans. The discounts depended on the sector, the amount of the loan, and on whether the bank restarted lending to the sector. For every three pesos of new loans extended by the bank, the government would assume an additional one peso of discount. The program thus combined loss sharing between the government and the banks with an incentive to restart lending. The program was successful in terms of rapid debt relief but at very large cost to the taxpayer.

C. Uruguay (2000)

In Uruguay, a debt restructuring scheme approved in June 2000 offered a framework for the systemic and compulsory restructuring of small loans (up to US\$50,000), by extending loan maturities and introducing gradually increasing payment schedules, and a largely voluntary scheme for large borrower workouts, with strong incentives for both banks and borrowers to reach restructuring agreements. Incentives to encourage creditor participation included (i) a flexible classification system for restructured loans to encourage banks to recognize implicit

²¹ Some of the cases described in this Appendix touch on the issues that go beyond the intended coverage of the note as outlined in Section A. Table A1 presents data on selected household indicators for each case study (except the ongoing cases).

losses; and (ii) a reclassification as a loss with a 100 percent provisioning requirement of the failure to restructure a nonperforming loan within the timeframe provided by the scheme.

D. Korea (2002)

A rapid expansion of the credit card market in Korea, encouraged by lax lending standards and other factors, resulted in a distressed credit card market with rising delinquencies in 2002.²² Credit card debt as percentage of GDP reached 15 percent in 2002. The credit card crisis spilled over to commercial banks, as commercial banks were heavily exposed to troubled credit card issuers through credit lines. Korean commercial banks' lending to one single large troubled credit card issuer stood at 38 percent of creditor banks' combined equity. Nevertheless, Korea's commercial banks were generally able to absorb the losses for their credit card units without broader repercussions, as affected credit card units were generally merged into the respective parent banks. The stand alone credit card companies were generally more severely impacted by the credit card crisis. The principal ways of dealing with the bad credit card debt were loan write-offs. Other resolution methods employed include sales to third parties and debt-to-equity conversions of credit card issuers' debt. In addition, Korean authorities allowed credit card issuers to roll over delinquent credit card loans, a practice known as "re-ageing." This form of regulatory forbearance eased the burden of provisions and charge-offs of these loans for issuers.

E. Argentina (2002)

The 2002 Argentine asymmetric pesification is an example of what not to do. Argentina introduced a heterodox economic program in response to the crisis in January 2002 that included an external debt moratorium, an end to Convertibility, and introduction of a dual exchange regime. In February, the exchange regime was unified, the maturities of time deposits extended (the "corralón"), and bank balance sheets dedollarized at asymmetric rates—Arg\$1 per dollar on the asset side, and Arg\$1.4 per dollar on the liability side. The assets and liabilities of the banks were also subjected to asymmetric indexation: deposits were indexed to the rate of consumer price inflation while certain loans were indexed to wage inflation.

This policy framework imposed significant losses on banks and depositors. The fiscal cost amounted to about 15 percent of GDP, largely due to fiscal outlays accruing to the banks²³; the losses suffered by banks far exceeded the entire net worth of the banking system. The deposit freeze and conversion resulted in a loss of depositor confidence and the collapse in financial intermediation. The conversion of deposits meant a dollar value erosion of 40 percent. Banks also lost because many of the credit-worthy borrowers worrying about a further change in

²² See also http://www.bis.org/repofficepubl/arpresearch_fs_200706.01.pdf?noframes=1

²³ A large fraction of this fiscal cost includes subsidies to banks to compensate for the asymmetric pesification and asymmetric indexation.

government's decision opted to pay off their loans. This left the banks with a smaller and a lower quality loan book. Most banks reported significant reductions in both staff and in branches and remained cautious in expanding credit. The conversion led to a severe undercapitalization of the banking system. Moreover, depositors took advantage of exceptions and loopholes in the system, using judicial rulings to release frozen deposits at market exchange rate. In this environment, a large number of banks were weakened and became dependent on the central bank liquidity window, accounting for 13 percent of total assets in 2003. The crisis had profound effects on the portfolio of the banking system. Private sector credit fell sharply, reflecting the collapse in credit demand and the repayments by existing borrowers. By 2003, the loans to the private sector declined to 15 percent of total assets (USD8.4bn) while exposure to the public sector increased to 50 percent of total assets.

F. Taiwan Province of China (2005)

Rapid expansion of credit card debt resulted in a distressed credit card market, although credit card losses mostly affected small and specialized institutions. The ratio of nonperforming loans (NPL) to total loans for cash cards peaked at about 8 percent in 2006 (up from about 2 percent a year earlier), and for credit cards at about 3.5 percent (up from about 3 percent a year earlier). The system-wide NPL ratio was not visibly affected and continued its downward trend that began when Taiwan POC's financial sector reform program began in 2000. Whilst the system-wide NPL ratio was not that much affected by the non-performing card loans, there was a negative impact on the profitability of domestic banks. Average return on equity of domestic banks dropped to -0.41 percent at end-2006 (from 4.58 percent at end-2005) and average return on assets dropped to -0.03 percent at end-2006 (from 0.31 percent at end-2005). To facilitate renegotiation of debt between credit card issuers and debtors, the authorities initiated a personal debt restructuring program offering better repayment terms, covering 30 percent of outstanding credit card balances. Restructured loans were largely reclassified as performing, effectively granting issuers regulatory forbearance.

G. United States (2008)

A prolonged credit boom, supported by low interest rates and lax underwriting standards, and the expectation of rising house prices, came to a halt in 2007. The burst of the U.S. housing bubble led to rising foreclosures, which further depressed house prices. Foreclosures are on the rise because of household debt overhang,²⁴ coordination failures in arranging pre-foreclosure

²⁴ About 10 million U.S. home owners reportedly have negative equity, and more than half of subprime borrowers have debt-to-income (DTI) ratios exceeding 38 percent, a level below which loans are generally deemed affordable in the US.

workouts, and legal impediments to loan workouts.²⁵ The U.S. federal government has introduced or sponsored a number of homeowner “rescue” programs, starting with the FHASecure program²⁶ announced in August 2007, and more recently the Hope for Homeowners (H4H) program²⁷, which was activated on October 1, 2008. These efforts have met with only very limited success in stemming foreclosures.²⁸

In addition, the Federal Deposit Insurance Corporation (FDIC) has introduced a streamlined modification program for the mortgage loans it picked up from failed mortgage lender/servicer IndyMac.²⁹ A similar program for Fannie Mae and Freddie Mac guaranteed mortgages was also

²⁵ Including no-recourse mortgages that allow “under water” borrowers to walk away from affordable loans; bankruptcy law that does not allow modification of unaffordable mortgages on principal residences; and lack of safe harbor for loan modifications that leaves servicers open to lawsuits from disgruntled investors.

²⁶ FHASecure, introduced on August 31, 2007 but significantly amended on May 7, 2008, offered stressed homeowners an opportunity to refinance into FHA-insured loans. The lender had to agree to write the loan off (via a “short refinancing”) for an amount not to exceed 97 or 90 percent of the current appraised home value, depending on the borrower’s recent payment record. The 97 percent LTV applied to borrowers who had not missed more than two monthly payments (individually or consecutively) during the previous year, and 90 percent to borrowers who had missed up to three monthly payments. The payments on the new loan were not to exceed 31 percent of income, and the total of all debt payments (home and non-home) were not to exceed 43 percent. Delinquent borrowers had to pay a 2.25 percent up-front mortgage insurance premium (UFMIP) and 55 basis points annually, while current borrowers paid 1.50 and 0.50 percent. The program, however, has not been successful in overcoming the difficulties identified in the previous section. The number of FHASecure refinancings has been disappointing, and it was phased out at the end of 2008.

²⁷ The H4H program improves on FHASecure by covering severely delinquent borrowers, and providing incentives for 2nd lien write-offs. It applies to mortgages on primary residences originated before January 2, 2008, and to borrowers whose current mortgage payments exceed 31 percent of gross income. The lender has to agree to write the loan off for an amount not to exceed 96.5 percent of the current appraised value, and waive all prepayment penalties and late payment fees. This “short refinancing” is funded by a new 30- or 40-year fixed-rate FHA-insured loan with payments that are at or below 31 percent of income, and ensuring that all debt payments (home and non-home) are at or below 43 percent. For borrowers with higher debt loads, the debt-to-income ratio can be expanded to 38 percent, but, in this case, the new principal amount cannot exceed 90 percent of current appraised value. The 1st lien holder also pays a three percent upfront FHA insurance premium, and the homeowner pays a 1.50 percent annual premium. In addition, if the homeowner sells the house or refinances the new mortgage, the Department of Housing and Urban Development (HUD) gets back some of the “instant” equity (100 percent in the first year, declining to 50 percent after five years), plus, if the property is sold, 50 percent of any net HPA. Also, borrowers are prohibited from taking out new subordinated liens during the first five years, except when necessary to ensure maintenance of property standards.

²⁸ For further details, see Kiff, J. and V. Klyuev (2009), “Foreclosure Mitigation Efforts in the United States: Approaches and Challenges”, IMF Working Paper, forthcoming.

²⁹ Under the IndyMac Loan Modification Program, eligible mortgages will be modified into sustainable mortgages at a permanently reduced interest rate to achieve sustainable payments at a 38 percent debt-to-income ratio. Eligibility for the loan modification will be available for borrowers on a first mortgage on their primary residence which is owned or securitized and serviced by IndyMac where the borrower is seriously delinquent or in default. The

(continued)

introduced by the Federal Housing Finance Agency (FHFA).³⁰ They both use a stepwise decision processes that focuses on affordability, and not negative equity.

Several large U.S. banks have recently designed voluntary workouts of distressed mortgages. For example, Citigroup announced early November 2008 that it would modify terms on mortgages with debt-to-income ratios in excess of 40 percent. Modifications would include a lowering of the interest rate, extension of the terms of the loans, and as a last resort a reduction in principal.

Also, some states have imposed foreclosure moratoriums, typically of three-to six months long, but these are just temporary palliatives that are unlikely to be effective in the long run in the absence of a more comprehensive approach.

H. Hungary (2008)

In November 2008, Hungarian commercial banks—faced with increased credit risk of their loan portfolios denominated in foreign currency due to a sharp depreciation of the local currency—signed a gentleman’s agreement with the ministry of finance on a foreign-currency loan workout program.³¹

The workout provides the borrowers with the following options: (a) apply to have their foreign currency loans converted to forint-denominated loans. If they do so before the end of the year, they will not be charged additional fees; (b) ask for an extension of the loan duration free of charge if there is a significant rise in their monthly repayments; and (c) ask for a temporary easing of repayment obligations, especially for borrowers who become unemployed. The key elements of the restructuring (i.e. the rate of loan conversion into the local currency and interest rates charged on restructured loans) were left to be determined by the parties involved. The conversion part of the program has not been taken up because of high domestic interest rates.

loan modification does not involve fees or other charges for the borrower. The IndyMac scheme is an example of a voluntary loan workout scheme.

³⁰ Firstly, they only consider for modification loans that are seriously delinquent (60 days or more for the FDIC program and 90 days for the FHFA program) to borrowers who own and occupy the property, and who have not filed for bankruptcy. The programs then attempt to find the modification with the minimum NPV impact that achieves a 38 percent DTI. The sequential process used by the FDIC program starts by capitalizing the arrearage into the unpaid balance, and if the resulting payment puts the borrower’s DTI over 38 percent, interest rate reductions and amortization term extensions are offered. If the DTI is still over 38 percent, principal forbearance is applied, involving converting a portion of the unpaid balance into a zero interest note due when the mortgage is paid off. Seriously delinquent loans, for which these modifications are insufficient to achieve the DTI targets, can still be considered on a case-by-case basis.

³¹ Reportedly, the agreement was signed somewhat reluctantly by the largest nine commercial banks, after the Ministry of Finance had stated it would introduce legislation to the same effect.

In addition, the government is preparing a legislation that would allow for temporary government guarantees (up to 2 years) on mortgage payments for those who become unemployed. While the final details are not available yet, preliminary reports suggest that the guarantees will be available for mortgages outstanding up to 20 million HUF, on primary residence only, and would require that a minimum payment of 10,000 HUF a month is maintained by the borrower.

I. United Kingdom (2008)

Early December 2008, the U.K. Treasury announced the Homeowners Support Mortgage Scheme to reduce the number of home foreclosures. Under the scheme, U.K. homeowners struggling to make mortgage payments can defer a portion of their payments by up to 2 years. Borrowers with mortgages up to £400,000 and with savings lower than £16,000 are eligible to roll up mortgage payments into the principal, and pay off the principal when conditions improve. The U.K. Treasury will guarantee the deferred interest payments for those banks participating in the scheme. Most of the country's largest lenders agreed to participate in the program.

Table A1. Household indicators, pre- and post-debt restructuring

	United States (1933)		Mexico (1998)		Uruguay (2000)		Korea (2002)		Argentina (2002)		Taiwan Province of China (2005)	
	1932	1936	1997	2001	1999	2003	2001	2005	2001	2005	2004	2008
Household income growth (in %)	-25.8	15.1	5.2	-1.2	-3.3	2.3	3.1	3.7	-5.4	8.1		
Consumption growth (in %)	-21.5	9.7	6.5	2.5	-1.5	2.0	4.9	3.6	-5.7	8.9	4.5	1.3
Unemployment rate (in %)	22.7	14.2	3.7	2.8	11.3	15.4	4.0	3.7	20.7	10.1	4.4	3.9
Private debt/GDP (in %)	45.4	32.1	24.5	14.5	49.8	46.4	92.7	100.3	20.8	11.7		

