DEBTORS’ CRISIS OR CREDITORS’ CRISIS? WHO PAYS FOR THE EUROPEAN SOVEREIGN AND SUBPRIME MORTGAGE LOSSES?

JAN KREGEL
3 Preface
Dimitri B. Papadimitriou

4 Debtors’ Crisis or Creditors’ Crisis?
Jan Kregel

11 About the Author
Preface

In the context of the eurozone’s sovereign debt crisis and the US subprime mortgage crisis, Senior Scholar Jan Kregel looks at the question of how we ought to distribute losses between borrowers and lenders in cases of debt resolution. Kregel tackles a prominent approach to this question that is grounded in an analysis of individual action and behavioral characteristics; an approach that tends toward the conclusion that the borrower ought to bear the entire burden of making creditors whole. The presumption behind this style of analysis is that, since the borrower (the purportedly deceitful subprime mortgage borrower or supposedly profligate Greek) is the cause of the loss, the borrower should bear the burden.

Kregel points out the fundamental weakness of this approach and suggests an alternative that takes into account the linkages between balance sheets and cash inflows and outflows. Instead of focusing exclusively on the individual actions of debtors, his analysis takes into consideration the interactions between such actions and the cash flows and balance sheets of other sectors and external economic partners.

The upshot of this alternative analytical approach is to cast doubt on the proposition that debtors can fully bear the losses in a debt resolution. Moreover, it reveals that the behavior and policy of creditors is just as important a factor to consider in assessing the situation. For instance, domestic adjustment on the part of a debtor country as part of its effort to repay creditors can only succeed with the cooperation of that country’s external counterparts.

If borrowers are going to be made responsible for losses, says Kregel, they need to be able to rely on rising external demand. The net increase in foreign demand has to be sufficiently large to offset the cost of servicing existing debt and to stimulate rising incomes and the resulting higher government revenues that are necessary for debt repayment. If both Greek households and the Greek government are going to be spending less and saving more, then in order to prevent incomes from falling (which would make it more difficult to redeem outstanding debts), demand will have to come from somewhere; if not from Germany, the increase in demand would have to come from the rest of the periphery.

But as Kregel points out, Greece cannot adjust its exchange rate and remain in the eurozone. Given the unlikelihood that Greece will be able to improve its external competitiveness in the short run, it will not be possible for both Greek households and the Greek government to be in surplus. Greece, in other words, cannot meet its debt obligations on the basis of internal policy alone. Kregel demonstrates that the key to resolving the eurozone problem actually lies just as much in German domestic policy as it does in Greek policy. Asking Greece to shoulder the entire burden is tantamount to asking a debtor to behave more like a creditor. But as Kregel points out, this will be possible only if creditors, in turn, begin to behave more like debtors—if Germany, as he puts, becomes more like Greece.

Kregel performs a similar analysis of the US situation. Without any government relief, homeowners who are underwater on their mortgages will have to reduce consumption and increase savings in order to pay down their debt. If households and private businesses are cutting back, government can run a budget surplus only if there is an offsetting external surplus. Given current global economic conditions, this is unlikely, observes Kregel: the United States will not have an external surplus. This means that either the public sector or the private sector must fail to achieve their goal of running a surplus.

As always, I welcome your comments.

Dimitri B. Papadimitriou, President
November 2011
A Brief History of Sovereign Debt Resolution

The aftermath of the Latin American debt crisis was dominated by discussions of how to distribute the costs of the International Monetary Fund (IMF) and developed country financial support to insolvent government borrowers. Since US banks would have been technically insolvent had the losses on their lending to Latin American borrowers been recognized, it was impossible to suggest losses for the private lenders. Instead, the Federal Reserve adopted a policy of “forbearance,” which placed the onus on the borrowers to meet the full value of their loans.

One of the difficulties of distributing the costs of debt restructuring was reaching agreement among multiple creditors to new payment terms. The introduction of collective action clauses (CAC) into bond indentures was suggested as a means of facilitating qualified majority decisions to adopt debt restructuring. By the end of the 1990s virtually all new issues of sovereign bonds included such CACs.

The same issues of the appropriate division of losses from financial crisis resurfaced after the Asian crisis of 1997. To deal with such problems, in 2001 the IMF proposed a sovereign debt resolution mechanism (SDRM). Originally proposed by the United Nations Conference on Trade and Development on behalf of developing countries in the 1970s debt crisis, it was not adopted after the Asian crisis due to the objections of developing countries that it would be inappropriate for a protected creditor (the IMF) to be the agent operating the mechanism. At the time it was noted that an IMF program loan had never defaulted, and that as a result it was considered a super-super senior creditor in any discussion of revision of terms in a sovereign debt restructuring (see Ocampo, Kregel, and Jones 2007, 129 ff.).

The discussions continued during the Argentine crisis, with the US Treasury Secretary arguing in favor of allowing sovereign bankruptcy as a means of imposing a market solution on the distribution of losses between debtors and creditors. As a result, the IMF did not provide any additional funding to facilitate or influence the Argentine debt resolution, which produced a unilateral exchange offer involving a roughly 70 percent haircut. In contrast to previous restructuring, the new Argentine government argued that that the first priority should be a recovery in the Argentine economy, without which even the remaining obligations would not have been honored. In this vein, the new debt included warrants designed to link investors’ returns to the expected improvement in growth performance. And this has been the case.

Resolving Impaired Debt in the Current Crisis

It is thus not surprising that the recent private sector financial crisis in the United States and the sovereign debt crisis in the eurozone have raised similar issues of how to distribute losses between borrowers and lenders. Echoing the Latin American debt crisis resolution, the discussion in the United States is about the role of government in restoring banking institutions to solvency, even while homeowners with mortgage debt equal to or greater than the value of their home are subject to foreclosure if they are unable to meet the current debt service. The fear of the negative impact of the insolvency of financial institutions in developed countries has meant that they have been protected and the major burden of losses has fallen on the private and sovereign borrowers.

In discussions of the existing and future support to be given by the European Union to member-states unable to access private financial markets to refinance their maturing debt, the German government has insisted that governments should institute policies capable of producing fiscal surpluses in order to pay off the debt as it matures; or, in the event that this is not possible, that private sector bond holders be “bailed in” through PSI (private sector involvement) to share the burden of any losses. However, the retiring head of the European Central Bank (ECB) has argued against this position on the grounds that it will induce contagion, as bond holders flee the other indebted European countries’ bond markets, making it more difficult to refinance existing debt and making private sector participation in any restructuring less likely.

It might be thought that this discussion of the sharing of the burden of losses is the result of a belief that both borrowers and lenders should bear an equitable burden of adjustment. However, in virtually every crisis, financial institution creditors have been given favorable treatment because of their crucial role in the economy. This is the source of the idea that financial institutions are “too big to fail” and thus should be rescued with public funds. But this argument does not necessarily apply to private sector investors. Yet, in the Latin American crisis and Asian crises, the IMF provided governments the funds needed to pay their private creditors in full. This solution has often simply transformed a private sector debt burden into a public sector or sovereign debt burden, shifting responsibility from the private sector to the entire population.

In the present US crisis the burden of loss has been shifted from the financial institutions to the general public, with little
attention paid to the position of the borrowers; that is, the households who have issued mortgage debt. However, while there was little pressure to get the banks to repay the losses that their actions caused, politicians have been vocal in insisting that the US government should repay the debt that was created by the bailout of those same institutions. It is not clear exactly who is going to be repaid, but the government is required to run a fiscal surplus in order to do so.

The argument advanced in the EU is a little different. In the absence of a European government or unified fiscal agency, it is argued that the burden of EU support will fall largely on German and French taxpayers. Thus, the issue of equity is not one of distribution between creditors and debtors, but of how the burden on the debtors will be distributed. The move to increase creditor participation is meant to reduce the burden on German taxpayers, not to reduce the burden on the taxpayers of the sovereign debtor countries.

Whatever the nature of the argument, the basic presumption is that the borrower is the cause of the loss, and therefore the borrower that should bear the burden of making creditors whole by making payment in full, whether it is the private lender or the government bailout of the private lender. If the source of the losses is the deception practiced on lenders by low-income, lying borrowers, rather than the deception perpetrated on the borrowers by lenders in their presentation of the terms of the loan, then the borrower should pay, via foreclosure, through the loss of his or her house. The wronged party was thus the financial lender, who deserved to be saved by federal government support. Instead of the rich bankers exploiting the poor customer, it was the low-income borrower who had hornswoggled the rich and should be made to repay the losses. The result was the creation of the Tea Party movement that is currently raising havoc in US fiscal policy.

The more refined version of this argument is that it was the misguided government policy of helping low-income families to own their own home, or the role of government-sponsored enterprises (e.g., Fannie Mae and Freddie Mac) in supporting low-income access to mortgages, that was the cause of the problem. Here, both the government and low-income borrowers are at fault.

A similar discourse has been employed in identifying the guilty parties in the sovereign debt crisis facing the eurozone. The culprits are clearly the profligate Greeks (as well as Italians, or Spaniards, or Portuguese) who are inherently lazy, spend too much, borrow too much, evade taxes, and retire too early on baby pensions, and the Greek government that made false reports of its fiscal position when it applied to join the eurozone.

In both of these explanations the conclusion is obvious. The borrowers have to be made to pay by turning them into responsible citizens who work hard, consume little, save their money, and pay off their existing debts. It is for this reason that the planet’s most efficient debt collector and senior secured creditor, the IMF, has been called in to help provide the solution to the Greek threat to the survival of the euro. Here the explanation is due to individual behavioral, or even racial, characteristics. In fact, the IMF once argued that the Argentine population suffered from mental illness because it had failed to respond to an IMF austerity policy with behavior that led to higher growth (Valente 2000). The Greek citizens appear to be similarly afflicted, as the austerity policies have so far only reduced growth and increased the government deficit, without improving debt sustainability.

Implications of the Obvious Solution

Since the creditors at risk are the sober Germans who spend little, save much, and pay taxes, who do not borrow and never cook the books, the Greeks should work more and spend less. This would allow Greece to repay its debt in full and protect the righteous Germans from having to provide support for the Greek freeloaders.

But Greeks already work on average 1,900 hours per year, the highest annual workload in the EU (ahead of the Spaniards, who clock in with 1,800 hours). This makes it difficult to work more, and therefore difficult to “decide” to earn more. The only solution, then, is that they will have to consume less so that they can save a higher proportion of their incomes and pay more taxes to provide the euros to repay foreign creditors. But here is the main point of John Maynard Keynes’s theory: this can only occur if incomes remain the same. And since Greeks cannot sell more to themselves if they are consuming less, this can happen only if Greece manages to sell more to foreigners than it pays them in debt service. If this is not the case, demand would decline, unemployment would rise, and debt would continue to increase. Indeed, there is no guarantee that the savings rate would in fact increase, since income might fall faster than savings could increase if external demand were not sufficiently high. And this is unlikely if the Germans continue to behave like Germans and consume little.
The probability of rising ratios of indebtedness to income is even more probable if interest rates on foreign borrowing increase due to the belief in a higher risk of default or a downgrade in the sovereign debt rating. This suggests that there are two crucial factors involved in any attempt to make the borrower responsible for loan losses. The first is the ability to roll over maturing debt at low interest rates. It is this factor that the EU is currently dealing with by providing short-term official support from member governments and the ECB to allow Greece to meet near-term maturities. But it is the second factor that is even more important: there must be an increase in net foreign demand sufficient to offset the carry of existing debt and provide an increase in incomes that will serve as a base for higher government revenues and debt redemption. If this is not the case, there may be no way that borrowers can shoulder the losses by attempting to behave more like creditors, unless the creditors become more like borrowers. Successful repayment of the debt would then require Germans to behave like Greeks!

Those Lazy Greeks

This again raises the question of the extent to which the problem is caused by the behavioral characteristics of borrowers. If these are indeed cultural, then the low-saving, indebted Greeks cannot raise their savings rate to the level of the righteous Germans without causing the Greek economy to collapse—and possibly damaging the German economy as well. Indeed, once the interdependence of balance sheets and cash flows across countries is recognized, it is possible to show that it is not necessarily behavioral characteristics that explain the differences in the performance of the Greek and German economies. Rather, it may be due to different domestic economic policies determining the relative attractiveness of consumption and investment in each country.

From the aggregate income identity we know that national income is determined by aggregate expenditure. We also know that aggregate expenditure is determined by household decisions to consume, business sector investment, government expenditures net of taxes, and net exports. It is usually assumed that the household sector is a net saver, spending less than income, while the business sector is a net borrower, spending on investment more than it earns in profits (although this clearly has not been the case in the United States in the recent period!). But, irrespective of the balance between households and firms, the combined private sector cannot save on net more than the net deficit of the government sector plus the net external sector balance. While we all know (perhaps from personal experience?) that any individual economic unit can spend more than it earns, this is not true for the aggregate economy as a whole without some adjustment in another sector or in the level of income. This is the basis for the argument given above. It is a simple derivation of the Keynesian definition of aggregate demand:

\[ Y = C + I + (G - T) + (X - M) \]
\[ C = Y - S \]

so

\[ Y = (Y - S) + I + (G - T) + (X - M) \]

or

\[ 0 = (I - S) + (G - T) + (X - M) \]

Thus, we can derive the net position of any given sector on the basis of the behavior of the other two sectors—for example, 

\[ (S - I) = (G - T) + (X - M) \]

The ability of the private sector to repay debt will require that it acquires financial assets in order to extinguish outstanding debt. This means that private sector income will have to exceed expenditure and \( S > I \). This in turn will require that the right-hand side of the equation \( S - I = (X - M) - (T - G) \) be positive. At the same time, if the public sector is to also be in a position to repay debt, it must capture part of this private sector saving, which means that \( T > G \). Thus, in order for the right-hand side of the equation to be positive with the public sector running a fiscal surplus, \( X - M > T - G \).

This argument can be represented graphically by employing a device suggested by Robert Parenteau of MacroStrategy Edge and the Levy Economics Institute. In Figure 1 the diagonal line represents a position of zero net saving for the private sec-

**Figure 1**
tor and the values of the government fiscal balance and the external balance represented on the axes. Quadrant IV shows the positions of the other two sectors that produce a private sector surplus, as do sectors Ia and IIIa. If a country is going to repay debt, then both the private sector and the government sector must be in surplus. Thus, we are interested in sector Ia, where the private sector shows net savings.

But, if the government sector is also going to be in surplus, we must find the areas of increasing government fiscal surplus, as given in Figure 2. All of these positions are in sector Ia, and the condition for this is that the external surplus is greater than the government surplus. This means that \((X - M) > (T - G)\) if the public sector is also to be able to delever via a fiscal surplus \((T > G)\). Thus, the external sector becomes an important determinant if domestic saving is to occur without a declining level of income.

The same relationships can be illustrated by taking the fiscal balance as the dependent variable. This is shown in Figures 3 and 4. Again, the relevant area for both the government and private sectors to be in surplus—that is, to be able to pay down debt, or delever—is in sector Ia. The diagrams thus confirm the result that the ability to obtain an external surplus is crucial to the ability of the private and government sectors to pay down debt. Since the external account is the mirror image of the net balance of the private and government sectors of its foreign trading partners, domestic adjustment to allow debtors to fully repay creditors can only occur with the cooperation of the debtors’ trading partners.

In the case of the EU and Greece, the most important “external” sector is the rest of the EU—most of all, Germany! Thus, while Greece could conceivably produce a surplus in the fiscal and private sectors without German participation, this would only be possible if Greece were able to run a sufficiently large surplus with the rest of the non-EU world. Now, it is unlikely that Greece would be able to do this, at least in the short run and without exchange rate adjustment. The position facing Greece and other EU periphery countries would then look like Figure 5, which reflects the Stability and Growth Pact (SGP) limit on the fiscal balance of -3 percent.
Thus, given the inability to improve external competitiveness in the short term, it is impossible to have both the private and fiscal balances in surplus. If the public sector is to repay public debt, the private sector will have to be in deficit. On the other hand, if the private sector is to be in surplus, then the range of possible outcomes is reduced to the small triangle bordered by the SGP limit. It seems improbable that the private sector will be able to run deficits if it is already overindebted and trying to repay debt. This is the conundrum facing Greece and the source of the idea that Greece cannot meet its external debt commitments on the basis of internal policy measures alone.

Just as it is inappropriate to extend the analysis of the household budget constraint to the economy as a whole, it is also inappropriate to extend it to the analysis of national solvency in the international context. Indeed, it may be the case that the policies of foreign governments are a major determinant of domestic performance. This was the conclusion that Keynes came to in his work on German postwar reparations. Germany could repay the Allies only if the Allies were willing to boost their consumption of German goods. The solution that was eventually adopted—increasing short-term private lending to Germany rather than increasing imports of German goods—laid the basis for both the 1929 US stock market crash and the rise of fascism in Germany.

Thus, the behavior of creditors is as important as the policies of debtors if the debt is to be resolved with a stable level of income. If Greece’s creditors want to be repaid, those eurozone countries with positive notional current account balances with Greece have the choice of drinking more Greek retsina, or lending Greece enough to pay its debt service.

Yet, there is one possible solution via the external balance: the export of Greek workers leading to increased emigration and generating a flow of remittances that is sufficient to cover debt service. Since in principle there is free movement of labor within the EU, this may be the only viable solution to the euro crisis. Germany would then face the choice of accepting the losses on Greek debt or allowing unlimited immigration from Greece.

Absent this solution, the response has been the one used for Germany after World War I: short-term official financing.

**The Solution to the Euro Crisis is in Germany, not Greece**

Only a shared solution can solve the problems of the eurozone. Consider the policies introduced by the German government after reunification in 1990 (see Kregel 1999). Wage growth was slowed below the growth in productivity and unit labor costs fell. Inflation dropped below that in the rest of the eurozone, effectively undervaluing German exports. This is equivalent to an implicit subsidy for exporters’ profits and export sales, and a tax on consumption. Interest rates set by the ECB on the average EU inflation rate in the presence of low inflation produces high real interest rates and thus further rewards saving. As a result of these policies, Germany’s government deficit fell (as unification expenses were reduced) and its external surplus rose, boosting the German savings rate. With a lowered government deficit, the external position had to more than offset it, or the growth rate would have fallen—which is in fact what occurred. The result is growth in German GDP in excess of the growth of consumption and a rising German savings rate. It should be obvious that this result is independent of whether or not Germans are more parsimonious than Greeks, either ethnically or culturally. The Germans were simply responding to policy incentives introduced in order to pay for reunification.

But within a monetary union such as the euro, this domestic policy means that Germany has to be a net lender to the rest of the world, and in particular to the rest of the European Union, to the extent that it has a positive external balance within the EU, which is in fact the case. And this is precisely what happened. German banks lent to Greek private and government borrowers in order to allow them to run deficits and buy imports, many of them from Germany. The result: Greek fiscal and external

---

Figure 5

- Probable Range for Euro Periphery

![Diagram showing the relationship between fiscal and current account balances in the Eurozone.](image)
deficits, which produced a rate of growth of income below the rate of growth of consumption, a low savings ratio, and a rising debt ratio. It is thus not surprising that some of the largest exposures to Greek borrowers were German (and French) banks. But, if Greece is insolvent, then the loans to Greece are impaired and will not be redeemed, and the position of German banks is the same as that of US banks during the Latin American debt crisis. This is why the EU has insisted on Greece repaying its debt in full—to protect the financial system. But this does not mean that Greeks are more profligate than Germans are parsimonious. It is the policy mix that makes them so, not any inherent cultural characteristic. The real cost of a potential default will be borne by the lending banks. Recognizing this, it would be more efficient for the German government to simply indemnify their own banks—just as was done with East German banks in the reunification process.

This conclusion simply reflects the rising evidence in policy circles that countries with undervalued currencies have higher rates of income growth than consumption growth, and as a result have high savings rates (see, e.g., Frenkel or Bresser). China is not the only example of this phenomenon. Argentina after the crisis is also an example, as were most European countries during their post-war recovery. Angus Maddison, the wizard of national growth accounting, believed that an undervalued exchange rate was a precondition for growth. But for every undervalued currency there must be an overvalued currency, suggesting that the “behavior” of the GIPS (Greece, Italy, Portugal, and Spain) is no more inherent in their culture than the fact that the EU GDP manages to grow at a positive rate, given German policies. And it is Germany’s refusal to cooperate in a collective policy that imposes the opposite behavior on its eurozone trading partners.

If Germany Cannot Choose the Cooperative Solution

As already noted, unless Germany is willing to cooperate in terms of domestic policy, there is nothing that Greece can do to change its behavior. Greece cannot adjust its exchange rate and remain in the eurozone. It could attempt to reduce real wage growth to below the rate of productivity growth, but this would have to be at a rate higher than that practiced in Germany and would cause a reduction not only in demand and employment but also in saving. It would also reduce saving in Germany, since its growth rate would also fall due to a declining net external surplus. Germany can only continue its behavior by finding export markets external to the eurozone, which is what occurred as Germany increased exports to China. The bottom line is that Greece cannot repay its outstanding debt without a debt restructuring or a change in domestic policies in Germany. The solution to the euro crisis depends on German economic policy, not the character of the Greek people.

Many have suggested that the problem facing the euro is the absence of either an EU-level fiscal policy run by a European Treasury or a “eurobond.” But this will not be sufficient to solve the difficulties unless it also abolishes the ability of national governments to determine domestic fiscal, wage, industrial, and financial policy. This does not seem plausible in the short to medium term. On the other hand, the introduction of the single currency has been justified on the myth that it would temper the impact of German domestic policy on the rest of the EU by eliminating the impact of exchange rate instability and the need to hold reserves in order to stabilize exchange rates. However, with the euro issued by the ECB, rather than by national EU governments, the only way that national governments can insure against debt crises is by running an intra-EU surplus or by running a permanent government fiscal surplus. Under the euro, debt crises have simply replaced exchange rate crises, and government surpluses have replaced foreign exchange reserves. The only way in which the euro can produce positive growth is if each nation has an extra-eurozone surplus. The euro is thus destined to produce a deflationary impact, either on the eurozone or on the rest of the world—if not both.

The US Predicament

The solution to the Great Recession caused by the subprime crisis in the United States is similar. The failure to provide any relief to households who have negative net present value in their homes, or who cannot meet their interest service on their mortgages, means that they will have to reduce consumption in an attempt to increase saving to meet their payment commitments. If at the same time the private business sector adjusts to the crisis by means of cost cutting to increase profits (which has been the case), the entire private sector is attempting to run a surplus. At the same time, if Congress insists that the government debt created to bail out the insolvent financial institutions must be paid by running a budget surplus, then both sectors can achieve this result only if there is an offsetting external surplus. However,
given current international conditions this appears implausible. The external account will remain negative. As such, either the public sector or the private sector will fail to achieve their objectives. If the public sector manages to introduce a budget that produces a surplus, then the private sector will face falling profits, falling employment, and falling incomes. This will make it even more difficult for households to meet their debt commitments, since more and more of them will not have incomes at all, making it impossible to save. The debt crisis clearly is not over, within either the US private sector or the EU public sector.

Note

Versions of this paper were presented at the workshops “Is the Debt Crisis Over?” Universidad Autonoma Metropolitana Xochimilco, Mexico City, Mexico, July 11, 2011; and “Ponzi Finance, Public Debt, and Financial Crisis: The European Case and How to Prevent It from Happening Again,” Associazione P. Sylos Labini, IVIE, and the Ford Foundation, Valencia, Spain, September 29, 2011. Mario Tonveronachi and Etelberto Ortiz Cruz as well as other participants at the workshops provided helpful comments for revision.

References


About the Author

JAN KREGEL is a senior scholar at the Levy Economics Institute of Bard College and director of the Monetary Policy and Financial Structure Program. He currently holds the positions of Distinguished Research Professor at the Center for Full Employment and Price Stability of the University of Missouri–Kansas City and Professor of Development Finance at the Tallinn University of Technology. During 2009 he served as Rapporteur of the President of the United Nations General Assembly’s Commission on Reforms of the International Monetary and Financial System. He was formerly chief of the Policy Analysis and Development Branch of the UN Financing for Development Office and deputy secretary of the UN Committee of Experts on International Cooperation in Tax Matters. Before joining the UN, Kregel was professor of economics at the Università degli Studi di Bologna, as well as professor of international economics at Johns Hopkins University’s Paul Nitze School of Advanced International Studies, where he also served as associate director of its Bologna Center from 1987 to 1990. He has published extensively, contributing over 200 articles to edited volumes and scholarly journals, including the Economic Journal, American Economic Review, Journal of Economic Literature, Journal of Post Keynesian Economics, Economie Appliquée, and Giornale degli Economisti. His major works include a series of books on economic theory, among them, Rate of Profit, Distribution and Growth: Two Views, 1971; The Theory of Economic Growth, 1972; Theory of Capital, 1976; and Origini e sviluppo dei mercati finanziari, 1996. His most recent book is International Finance and Development (with J. A. Ocampo and S. Griffith-Jones), 2006.

Kregel studied at the University of Cambridge, and received his PhD. from Rutgers University. He is a life fellow of the Royal Economic Society (UK) and an elected member of the Società Italiana degli Economisti.