



## Paper Entanglements: Why (and How) Keynes's Ideas about Sovereign Debt Still Matter

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## KEYNES FOR TODAY

# **Paper Entanglements: Why (and How) Keynes's Ideas about Sovereign Debt Still Matter**

STEPHEN C. NELSON

*How to manage sovereign debt has become a key question in the problems that developed after the financial crisis. This author maintains that Keynes, who thought about this deeply between the wars, provides some critical lessons.*

Can Greece continue to pay the debt it owes to its creditors? The machinery of debt repayment churns away, while the fundamental question of the capacity (and wisdom) of the country's efforts to keep at it has remained without a definitive answer for (by now) a half decade.

The elements of the Greek crisis are familiar. In October 2009 the incoming Socialist government revealed that the outgoing center-right government had fudged the country's headline fiscal balance figures. The outgoing administration had projected a budget deficit of around 4 percent of GDP; the revised figure was closer to 13 percent of GDP.<sup>1</sup> The river of money that had been flowing into Greece from abroad slowed to a trickle; as a consequence, the price that the Greek government paid to investors to get them to buy the country's sovereign bonds skyrocketed. Before the crisis erupted, the "spread" on long-dated Greek bonds—the gap between the interest rate offered by Greece and the yield on German Bunds (the closest thing in Europe to a riskless asset)—had fallen to half a percentage point.<sup>2</sup> To investors in the sovereign debt market, Greece looked to be about as safe a bet as steadfast Germany. But after Prime Minister George Papandreou's revelation, the investment community turned on Greece. The interest rate on ten-year government bonds climbed higher and higher, eventually topping out at nearly 40 percent in late 2011.

Greece's debt managers faced an impossible situation: in order to make payments to its bondholders, the government had to borrow more from

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international investors, but the investment community now demanded an excessively high price for continued access to its resources. On the eve of the crisis, Greece (a country of 11 million people with an economy about the size of Massachusetts) had racked up obligations to investors that exceeded the foreign debts of Argentina, Brazil, and Mexico combined.<sup>3</sup> Greece owed a lot of money to a lot of people, and without access to new funds to help pay off its maturing bonds, the country would quickly fall into default. The potential damage to (primarily) European banks' balance sheets from a Greek default was thought to be catastrophic.<sup>4</sup> To stave off default, the International Monetary Fund (IMF), the European Commission, and the European Central Bank (the so-called "Troika") put together a bailout package of \$145 billion in May 2010. A second, even larger bailout (\$170 billion) followed in March 2012. A third bailout program to get Greece through the gauntlet of debt payments over the next three years is in the offing.<sup>5</sup>

The countries entangled in the eurozone's sovereign debt crisis have transferred, and will continue to transfer, a massive amount of resources to their creditors. Under the existing bailout package, Greek transfers amounted to about 20 percent of national income each year.<sup>6</sup> Can Greece (singled out here because its sovereign debt problems are particularly acute) adjust to difficult external circumstances and whittle down its debt load? Why has the eurozone's sovereign debt crisis dragged on for five years? And, given that the outcomes from various stopgap measures have underwhelmed, what are the better routes to stabilizing Europe's sovereign debt market?

### RETURNING TO THE MASTER (AGAIN)

In the wake of the eruption of the financial crisis in 2008 scholars, businesspeople, and policymakers alike rediscovered the economic ideas contained in John Maynard Keynes's extraordinary output. It was Keynes, Lord Robert Skidelsky argues, who supplied "the right kind of theory to explain what is now happening."<sup>7</sup> The cover of the October 2014 edition of *Bloomberg Businessweek* trumpeted Keynes's resurgence (the cover page reads: "Stimulate This! John Maynard Keynes has the last laugh on what works for the global economy"). Keynes wrote extensively on problems of servicing sovereign debt in the 1920s and 1930s. Naturally, the question follows: can Keynes's thinking about debt prove useful for understanding current dilemmas?

Jonathan Kirshner makes a strong case for going back to Keynes's "vast trove of original writings" to pick up the arguments and insights that may have fallen out of contemporary social scientists' fields of vision (the "extraordinary debris quietly fallen from frayed intellectual backpacks and conditioned by idiosyncratic choices about promising roads not taken," in Kirshner's felicitous phrasing), but which can shed light on some of the most difficult policy

problems that we face.<sup>8</sup> But Kirshner also rightfully cautions us to be wary of transporting the ideas Keynes developed in specific historical contexts to the present without acknowledging how his ideas and actions were shaped by the milieus in which he wrote. I try to follow Kirshner's dictums in this article. In the following section I describe how Keynes's thinking about the problem of German reparations payments to the Allies evolved between 1919, when he published *The Economic Consequences of the Peace*, through the early to mid-1920s (when he wrote *A Revision of the Treaty* and a short but insightful article entitled "Germany's Coming Problem"), and up to the 1929 *Economic Journal* debate between Keynes on one side and Bertil Ohlin (1929a, 1929b) and Jacques Rueff (1929) on the other over the German "transfer problem."

As I argue below, I believe that there are indeed some very useful insights to be gleaned from Keynes's writings on the German debt problem. Making the case for the enduring relevance of his work on sovereign debt does not, however, mean that Keynes got everything right, that the reparations issue on which Keynes fixated is perfectly analogous to the eurozone crisis, or that his ideas clearly dominate all other analytical frameworks for understanding Greece's debt problem and how to resolve it. Some prominent economists and historians have harshly judged this corner of Keynes's body of work. In Paul Samuelson's estimation, Ohlin scored a "grand slam" in his back-and-forth with Keynes on the transfer problem; two of the Chicago School's finest, Robert Mundell and Harry Johnson, accused Keynes of taking an "absurd position" in the debate and of being "technically incompetent" in his response to Ohlin's critique.<sup>9</sup> According to historian Stephen Schuker, Keynes's worst traits—"want of moderation, unscrupulousness in argument, and occasional obtuseness of moral judgment"—appeared most conspicuously in his labours on German reparations.<sup>10</sup>

Criticisms notwithstanding, the failure of the prevailing intellectual and policy paradigms to produce anything resembling a workable solution to the eurozone sovereign debt crisis forces us all to think differently. Is there anything of contemporary relevance to be extracted from Keynes's writings on the politics and economics of Europe's "paper entanglements" in the 1920s? In brief, yes, there are some very good reasons to return to Keynes's thinking on this issue. Three themes embedded within his work, I argue, contain enduring insights that make them well worth revisiting.

First, Keynes rejected the idea that the need to swiftly transfer large shares of national income from debtors to their creditors would trigger an automatic, equilibrating adjustment mechanism. This was the crux of Keynes's position in the debate over the transfer problem: in the 1920s Keynes argued that Germany would have to improve its trade balance and increase industrial output *before* it could handle the reparations payments. His critics disagreed, and argued that the transfers of income from debtor to creditors would, on their own, generate the necessary adjustment, making the debt burden imposed

on Germany manageable. Keynes's views are useful for understanding why Greece's difficult struggles to hew to its debt repayment schedule surprised many decision makers in Europe and elsewhere, and his thinking gives us a way to think about the capacity of countries to handle large transfers of income via debt service.

Second, Keynes was uniquely sensitive to the limits of forecasting when decision makers' environments are characterized by measurable risks and (more importantly) incalculable uncertainties. Keynes was not opposed to the effort to develop projections—in both *The Economic Consequences of the Peace* and *A Revision of the Treaty* he tries to estimate how much Germany can reasonably be expected to pay in the future—but his recognition of the “liability of human forecast to error” implies that policy choices should not be tethered to precise predictions.<sup>11</sup> This is a lesson from Keynes that the members of the Troika (especially the IMF) have mostly forgotten.

A third theme in Keynes's work, emphasized by Kirshner and present also in his writings on sovereign debt in the 1920s, is how “paper entanglements” threaten the fragile political and social foundations of international economic orders.<sup>12</sup> By identifying uncertainty as a fundamental condition of financial markets, Keynes directed our attention to the social conventions upon which money managers' expectations rest. In his 1937 *Quarterly Journal of Economics* article, Keynes identified three such conventions employed by the investment community: investors assume that the present is a much more serviceable guide to the future than a candid examination of the past experience would suggest; market players assume that the existing state of opinion as captured by prices, interest rates, output, etc. is based on a correct summing up of future prospects; and the individual investor tends to fall back on the judgment of the rest of the world, assuming that everyone else is better informed than she is.<sup>13</sup>

Conventions contingently stabilize decision makers' expectations and give them the courage to act in uncertain settings, but conventional expectations resting on “so flimsy a foundation” are inherently unstable.<sup>14</sup> In the years before the onset of the 2009 crisis, order in the eurozone sovereign debt market rested on a conventional belief: despite widely varying levels of competitiveness and productivity, the debt instruments issued by the Greek, Portuguese, Irish, and Spanish governments were effectively as safe as the debt offered by the Germans. “Why anybody should have imagined that Greek and German government debts were equivalent,” wonders Martin Wolf, “is not easy to comprehend.” But after 2008, Wolf continues, the international investment community “became reacquainted with the temporarily forgotten idea of risk.”<sup>15</sup> The sudden, unanticipated loss of confidence in the convention after the Greek government's announcement led to the unraveling of the order. From the Keynesian perspective we see how the postcrisis response from the policymakers in the core of the eurozone aimed at restoring the convention (without much success).

## A SHORT OVERVIEW OF KEYNES'S WRITINGS ON SOVEREIGN DEBT

Keynes's initial work on the problem of German debt arrived in the form of *The Economic Consequences of the Peace*, written in a fit of pique after he left the British delegation at the Versailles conference. Keynes objected to the size of the reparations bill presented to Germany; his calculations suggested that the maximum amount that the Germans could pay to the victorious Allies was 20 billion gold marks (versus the figure of 130 billion that was bandied about by the members of the reparations commission). The burden to be imposed on Germany was excessive; in arriving at the figure, the negotiators caved in to popular pressure (reflected in David Lloyd George's comment on the campaign trail, "Those who started it must pay to the utmost farthing, and we shall reach into their pockets for it").<sup>16</sup> In Keynes's view, Germany could not possibly manage such a heavy debt load. He laid a challenge at the feet of the designers of the Versailles Treaty: if Germany was to pay its reparations, it would have to raise funds by running surpluses on the balance of trade, year in and year out ("Germany can pay in the long run in goods, and in goods only").<sup>17</sup> Those "who believe that Germany can make an annual payment amounting to hundreds of millions sterling" would have to explain "*in what specific commodities* they intend this payment to be made and *in what markets* the goods are to be sold."<sup>18</sup> With Europe's productive capacity reduced after the war and the ever present threat of trade protection, the German debt burden would prove impossible to service. Keynes devoted a chapter of the book to the dreadful conditions in Europe at the end of the war. "Treaty clauses which are impossible of fulfillment" threatened to deepen the economic hardship rather than reverse it, with severe social and political consequences—"an inefficient, disorganised Europe faces us, torn by internal strife and international hate, fighting, starving, pillaging, and lying. What warrant is there for a picture of less sombre colours?"<sup>19</sup>

Keynes returned to the reparations issue two years later in *A Revision of the Treaty*. In the preface Keynes called the book a sequel to *The Economic Consequences of the Peace* (admitting that he had "nothing very new to say on the fundamental issues"). He once again argued that the war indemnity imposed by the Allies under the terms of the agreement was "more than Germany can pay."<sup>20</sup> Germany had begun to make reparations payments when the book was published, but Keynes was skeptical of the sustainability of the arrangement, for two primary reasons. First was the issue of the trade balance. His data showed that German imports exceeded its export revenues; by his calculations, Germany would have to "raise the gold value of her exports to double what they were in 1920 and 1921 *without increasing her imports at all*."<sup>21</sup> A big expansion in exports (and concomitant drop in imports) could only happen if the goods became cheaper, achieved "partly by the German working classes lowering their standard of life without

reducing their efficiency in the same degree, and partly by German *export* industries being subsidized, directly or indirectly, at the expense of the rest of the community.”<sup>22</sup> Presuming that Germany could somehow engineer such a large increase in exports, the flood of goods would likely be met by demands for protection abroad.

Second was the problem of the budget. Debt service was covered in part by taxes. Taxes were collected in paper marks while Germany’s liability was fixed in terms of gold marks. With accelerating inflation, the “taxable capacity of the people, measured in gold, is less than it was before.” Keynes argued that the German government would need to cut expenditures and raise revenue, forcing the government to decide how to spread the burden of adjustment across different segments of society (with the expectation that “the struggle will be bitter and violent, for it will present itself to each of the contesting interests as an affair of life and death”).<sup>23</sup>

In *A Revision of the Treaty* Keynes laid the groundwork for the debate in the mid- to late-1920s over the “transfer problem.” By breaking the German debt problem into separate components—the capacity of the government to raise the funds to pay the reparations *and* the independent effect of the transfer of income abroad in the form of reparations payments—Keynes suggested that even if the budget problem was solved, there was another reason to doubt the sustainability of Germany’s debt burden.

He used the transfer problem framework to puncture the optimism generated by the Dawes Plan of 1925. The Dawes Plan, spearheaded by the American banker Charles Dawes, sought a solution to the German reparations problem by hastening the end of the French occupation of the Ruhr valley, rescheduling German reparations payments to the Allies, and providing a sizable loan from the United States. When the plan was put into motion, three years of escalating price inflation had reduced the entire paper reichsmark value of German’s national debt to a gold value of less than £50.<sup>24</sup> The Dawes Plan solved the budget problem posed by the reparations by filling the gap with loans, mainly from the United States. By 1929, “foreign loans had more than covered German out-payments.”<sup>25</sup> But Keynes remained unmoved: “She is not through with reparation—she has not even begun.”<sup>26</sup> In the first year of the Dawes Plan, Germany had a sizable trade deficit, and the transfer committee, faced with the (still unsolved) problem of turning the current account balance around, might encourage the Germans to follow the orthodox prescription of keeping prices down by tightening credit. High rates of interest were manageable so long as the general level of prices was on the upswing, but “so soon as prices cease to rise, and worse still, if they begin to fall, a 10 percent rate becomes a crushing burden.” And with deflation comes unemployment: “to put 10 percent of the working population of Germany on the relief fund does not help reparations.”<sup>27</sup> Keynes drove to the nub of the issue. The Dawes plan had given the country “breathing space,” but it did not deal with the real problem of debt management—the “struggle to reduce the German workers’ standard of life.”



“The transfer committee needs a combination of good trade and low wages in order to effect its objects, and I doubt if the method of credit restriction can bring off the double event. Perhaps the Committee will be compelled to attack wages, which is their real objective, in some more direct way.”<sup>28</sup>

Events in 1929 precipitated Keynes’s final intervention in the German debt debate. Foreign investors had effectively financed Germany’s reparations payments in the years following the Dawes Plan (with enough left over to generate a small consumption boom).<sup>29</sup> Investors were willing to do so because of a key loophole in the plan: “transfer protection” was offered to the country’s commercial creditors, rendering private claims senior to the reparations claims held by the Allied governments.<sup>30</sup> The clause was eliminated in 1929 when a new reparations regime, designed by an expert committee led by American industrialist Owen Young, came into force.

In March Keynes published an article in the *Economic Journal* (for which he served as editor) with the first explicit reference to the “transfer problem.” Under the Dawes plan the Germans had borrowed to make its reparations payments. The arrival of the Young plan provided stark evidence suggesting that “the process of borrowing from abroad cannot go on indefinitely.”<sup>31</sup> With the supply of foreign credit to Germany soon to be closed, the transfer problem loomed: to keep the money flowing from Germany to its creditors, the country would have to increase its exports (Keynes thought a 40 percent rise in the value of exports was needed). But increasing its exports involved weakening the value of the reichsmark—which would perversely make it more difficult for Germany to make its debt payments, as the liabilities were denominated in gold marks that would be costlier to obtain as the paper currency depreciated—or imposing “wage cuts and an unemployment rate that were neither politically nor humanly feasible.”<sup>32</sup>

Keynes’s essay generated pushback from Bertil Ohlin and Jacques Rueff. Ohlin’s reply was mainly theoretical; Rueff’s comment was mainly based on France’s experience with reparations. Both pointed in the same general direction. The transfers of income from debtor to creditor would *automatically* generate the adjustment in trade balances necessary to sustain the reparations regime. In Ohlin’s view, Germany’s debt payments shifted “buying power” to the recipient countries; the reduction of “absorption” in the payer and increase in the payee would prove sufficient to adjust the trade balance without any major changes in the terms of trade or the general price level.<sup>33</sup> “Financial movements like the payment of reparation,” as Mark Trachtenberg explains, “in themselves actually help shape the balance of trade, and in so doing tend automatically to effect the transfer of real wealth they represent.”<sup>34</sup>

For Keynes, the smooth and automatic adjustment processes laid out by Ohlin and Rueff were based on faulty assumptions. The movement of capital from debtor to creditor was unlikely to change the balance of trade on its own because of rigidities in the economic structure. Relatively inelastic demand abroad, the high costs of switching from import-competing to exported goods,



geography and transport costs—each was a factor that led to a “certain ‘natural’ level of exports,” and to assume that trade adjusted swiftly and smoothly to transfers of income in the form of debt payments was an exercise in “applying the theory of liquids to what is, if not a solid, at least a sticky mass with strong internal resistances.”<sup>35</sup> Further, he argued that the ease of adjustment presumed by Rueff was not borne out in the historical record: “where a country’s difficulties are due to its owing a burdensome sum, readjustment is often brought about by just not paying it . . . . If M. Rueff will read the reports of the Council of Foreign Bondholders, he will find that history is on my side, not his.”<sup>36</sup>

Germany’s transfer problem vanished with the 1932 cancellation of the war debts, and Keynes’s attention was drawn to other, more pressing problems as the Great Depression deepened. Neoclassical economists chose Ohlin and Rueff as the victors in their debate with Keynes, and by the 1960s the transfer problem was treated as a diversion, peripheral to the core concerns of the fields of international macroeconomics.<sup>37</sup>

But the transfer problem identified by Keynes, while overlooked and underplayed, was not fully forgotten. Paul Krugman brought the concept back into mainstream international economics in his discussion of the East Asian financial crises of the late 1990s (noting that “this issue has been remarkably absent from formal models”).<sup>38</sup> To better understand the problems posed by the “sudden stop” of capital inflows to Greece, Portugal, and Ireland (the event that triggered the eurozone’s sovereign debt crisis) some observers also returned to Keynes’s work on the consequences of German war debts.<sup>39</sup> In the next section I briefly discuss three ideas in Keynes’s writings that I think are worthy of consideration as more than just historical artifacts; they are ideas developed in a particular historical context that nonetheless continue to shed light on some of the most challenging contemporary problems in sovereign debt markets.

### THREE ENDURING KEYNESIAN THEMES

#### Theme #1: The Illusion of Automatic Adjustment

Keynes argued throughout the 1920s that it would be impossible for Germany to whittle down its obligations to the Allies before the country was able, through its own internal processes of adjustment and with the help of its trade partners, to consistently run sizeable surpluses on the current account. Until the problem of the trade balance was solved, Germany’s debt situation was hopeless. Austerity alone could not right the ship.

The parallels between the debate in the 1920s on the sustainability of German reparations payments and the current debate over Greece’s ability to pay are clear. Ohlin argued that German transfers to its creditors entailed a painful reallocation of “buying power” to which the trade balance would automatically adjust. Adjustment would not be easy, but Germany could handle its debt—given a large enough transfer of income away from the

debtor toward its creditors, “an increase of [German] exports by 30, 40, or 50 percent does not seem impossible.”<sup>40</sup> Many observers take an Ohlin-esque line on the eurozone debt crisis: Greece (and the other countries dealing with adjustment problems) lived well beyond their means for a decade or more, and they have no choice after the sudden stops interrupted “unsustainable growth paths” but to “bring their spending in line with production.”<sup>41</sup> A combination of deep fiscal retrenchment to bring about a primary surplus and often vaguely defined “structural reforms” to unlock productive capacity will make the debt burden manageable. There is no transfer problem—no amount of sovereign debt is *prima facie* unserviceable—just a problem of finding the willpower to carry out the necessary painful steps to find a new equilibrium. A recent paper from a group of German economists exemplifies the view: “In the context of sovereign debt, debt sustainability has to be understood primarily as (a society’s) willingness to pay.”<sup>42</sup>

If we look at the eurozone crisis through Keynes’s lens, we might be more pessimistic about Greece’s ability (not just willingness) to manage its debt load. In “Germany’s Coming Problem” Keynes warned that the “orthodox prescription” of tight credit would yield deflation, unemployment, and reduced output—and ultimately it would do little to make the country’s debt more manageable.<sup>43</sup> It was unreasonable to demand reparations payments before Germany could engineer a huge increase in its exports, and if the probability that the country could actually engineer such an increase was vanishingly small (because workers would not bear the cost of reduced wages and, even if they did, trade partners would greet the onslaught of cheap German goods with protectionism), then it was more sensible to simply cancel the war debt.

Prominent economists now speak openly about the impossibility of Greece’s situation. At a gathering of central bankers in Switzerland, Harvard’s Benjamin Friedman delivered a shocking line in his keynote address: “The supposed ability of today’s most heavily indebted European countries to reduce their obligations over time, even in relation to the scale of their economies, is likely yet another fiction.”<sup>44</sup>

Keynes’s objection to German debt payments hinged on the issue of the trade balance; today’s analog is the issue of economic growth. The adjustment imposed by the cost of servicing the debt has destroyed some of the eurozone countries’ growth prospects. Greece’s economic output, for example, has shrunk by nearly a quarter since the onset of the crisis in 2009. Big declines in economic output threaten the sustainability of countries’ debt loads. The simple identity for debt sustainability, drawn here from work by economist Jay Shambaugh,<sup>45</sup> illustrates why that is the case.

$$\Delta D_t = (R_t - g_t) \times D_{t-1} + \text{primary}$$

The equation tells us that the level of a country’s debt-to-GDP ratio ( $D$ ) is driven by the interplay of the interest rate ( $R$ ), growth rate ( $G$ ), and noninterest

budget balance (*primary*). The relevance for the debate on austerity is the result that the debt burden expands when annual interest payments exceed the economic growth rate, *even if the primary budget balance turns positive*. In Greece, for example, growth under the IMF-EU-ECB program turned sharply negative; as a consequence, its debt-to-GDP ratio is projected to overshoot the IMF's target of 120 percent by 60 percentage points in 2015.<sup>46</sup> In his thinking about German reparations, Keynes took the position that recovery must precede repayment. As Eichengreen and Temin point out, even Herbert Hoover was eventually persuaded that Germany needed a debt moratorium.<sup>47</sup>

## Theme #2: Forecasting in the Presence of Uncertainty

The difficulty of forecasting future states of the world is a minor theme in Keynes's writings on sovereign debt. But when the brief references to the problem in *The Economic Consequences of the Peace* are combined with his foregrounding of epistemic uncertainty in his other writings, we can distill a powerful and still useful idea about the limits of our predictive abilities.

Uncertainty loomed large in Keynes's discussions of finance specifically and economic life more generally. Uncertainty for Keynes (as for Keynes's contemporary and University of Chicago economist Frank Knight) means that there is no basis for decision makers' attaching credible probabilities to different states of the world that might be brought about by, or come to bear on, a decision. Keynes had grappled with the implications of uncertainty since he began his dissertation (eventually published in 1921 as *A Treatise on Probability*). Some of Keynes's ideas about the German debt problem reveal traces of his acceptance of uncertainty as a fundamental condition of financial markets. In *The Economic Consequences of the Peace* Keynes emphasized the limits to our abilities to forecast. Because of the inaccuracy of our predictions in the face of uncertainty, he advocated conservatism when forecasting was an unavoidable part of the task at hand. The relevant section is worth quoting at length.

The secular changes in man's economic condition and the liability of human forecast to error are as likely to lead to mistakes in one direction as in another. We cannot as reasonable men do better than to base our policy on the evidence we have and adapt it to the five or ten years over which we may suppose ourselves to have some measure of prevision . . . .

The fact that we have no adequate knowledge of Germany's capacity to pay over a long period of years is no justification (as I have heard some people claim that it is) for the statement that she can pay ten thousand million pounds.<sup>48</sup>

Mainstream macroeconomists by and large elided the distinction drawn by Keynes and Knight between risk and uncertainty, but the conceptual difference remained important in the post-Keynesian corner of the discipline and in the field of economic sociology.<sup>49</sup> For the social scientists that take

Keynesian uncertainty seriously, the fact that we can often derive probability distributions from a time series of observed outcomes in some issue area does not help us answer the more important question of “what meaning the values calculated in this way should carry in interpreting the past and in using to forecast the future.”<sup>50</sup> Accepting uncertainty as a fundamental condition of economic life opened up a range of motives for investors’ behavior, many of which did not resemble rational maximization. These other motives have less predictable consequences, particularly when markets are under stress.

In his writings on German war debt, Keynes devoted substantial attention to the problematic social and political basis of the reparations system. Another leading (and similarly unconventional) international economist—Charles Kindleberger—also recognized the “intangible” elements of the problem of sovereign debt repayment. In a discussion of Finland’s decision to pay reparations to the Soviets, Kindleberger argued that the surprising outcome was “ascribable in major part to the intangible reality of a national effort of will, something that ordinary economic analysis is reluctant, and perhaps unable, to take into account.”<sup>51</sup>

All this points to the need to remain skeptical about our ability to forecast countries’ economic paths, particularly during turbulent periods. In the first stages of the eurozone’s debt crisis, however, some very important decisions were governed by the forecasts (later shown to be wildly inaccurate) produced by the IMF and the European Central Bank.

Consider Greece’s May 2010 IMF program (the largest in the institution’s history to that point). A principle of the Fund’s “exceptional access” policy is that credit will only be extended if the prospective purchaser’s sovereign debt load is sustainable. If the debt load is judged to be unsustainable, the Fund will not give access until the country’s bondholders agree to reduce the net present value of the debt they hold. The IMF staff’s predictions for Greek debt dynamics in 2010 suggested that the country’s burden was manageable; the debt/GDP ratio would peak in 2013 at 155 percent before falling toward the target of 120 percent in 2020. A program of austerity and structural reform—without any serious effort to get private bondholders to consider reducing their claims on the Greek government—went forward on the basis of the staff’s projections. The depth of the downturn in the next two years far exceeded the IMF’s projections. The staff expected a 5.5 percent decline in real GDP, but the actual decline turned out to be 17 percent; unemployment was 10 percentage points higher than the staff’s projections; and the debt-to-GDP ratio in 2012 was 30 percentage points higher than the predicted path. The IMF’s postmortem on the 2010 program noted: “The underlying debt dynamics worsened significantly because output contractions and deflation were more pronounced than expected.”<sup>52</sup> Perhaps the IMF’s forecasts were not sincere; the staff might have caved to political pressure from the institution’s powerful members in developing excessively optimistic

projections for Greece. Sincere or not, the episode is a useful reminder of the enduring importance of Keynes's warnings about the dangers of relying on forecasts to guide important policy choices made in the presence of uncertainty.

### Theme #3: Fragile Foundations of International Financial Market Orders

A third theme—the fragility of the foundations of international financial orders—runs through Keynes's writing on finance (and is discussed in greater detail by Kirshner [2009] and Skidelsky [2009]). Keynes viewed financial markets as inherently unstable, due to the fragility of investors' expectations. He distinguished goods in product markets that are consumed “within a short interval of their being produced” from financial assets, the future market price of which cannot be forecasted with much accuracy because “our knowledge of the future is fluctuating, vague, and uncertain.”<sup>53</sup> Cornell's Annelise Riles argues along similar lines:

Information about past market transactions can never fully predict future market problems or opportunities. Assets have value (positive or negative) that is by definition only discoverable over time and can never be fully predicted in advance . . . Relationships between market participants with respect to those assets unfold in time in ways that can never be fully anticipated or ensured.<sup>54</sup>

For Keynes, social conventions serve as substitutes for axiomatically rational calculations that are only possible in markets characterized by pure risk. Conventions enable pragmatic agents operating in the presence of uncertainty to overcome the paralyzing effects of “having to act in unpredictable environments”—not because social conventions and legal fictions actually transform the decision setting from uncertain to risky but because they allow agents to overlook “the profound uncertainty entailed in decisions by increasing commitment to what remain fictional expectations.”<sup>55</sup>

Confidence in the existing order is not ensured, however, and when money managers lose confidence, they look for cues to reconstruct their expectations, and often they look at what other investors are doing as a way to formulate their own expectations. This process can generate huge swings in market sentiments, and when the sentiment swings from confidence (or euphoria) to “utter doubt, precariousness, hope, and fear,” financial markets are plunged into crisis.<sup>56</sup> The speed of the change and size of the oscillation in financial markets' performance can be shocking (as it was, for many, in September 2008).

Kirshner<sup>57</sup> points us to the crucial chapter in *The Economic Consequences of the Peace* in which Keynes details the prewar order in Europe. (The chapter is now mostly revisited for the passage describing the extent of prewar globalization, particularly Keynes's amusing depiction of the ease of cross-border

migration, provided that the reader could “dispatch his servant to the neighbouring office of a bank for such supply of the precious metals as might seem convenient”). The chapter is important because it suggested the impossibility of reconstructing the social organization upon which the prewar financial order rested. With the social and political foundations destroyed by the Great War, the postwar “entanglements of cash owing” would prove to be an engine of conflict. Keynes feared the radical consequences of the failure to recognize the problem:

We shall never be able to move again, unless we can free our limbs from these paper shackles. A general bonfire is so great a necessity that unless we can make of it an orderly and good-tempered affair in which no serious injustice is done to any one, it will, when it comes at last, grow into a conflagration that may destroy much else as well.”<sup>58</sup>

The current problems of the eurozone are less dire than the ones Keynes diagnosed in 1919 Europe. But Keynes might again be useful for thinking about the prospects for the restoration of stability in the sovereign debt market. Before the onset of the crisis in 2009, the investment community’s behavior reflected the conventional belief that, in spite of their very large differences in levels of competitiveness and productivity (to say nothing of fiscal rectitude and institutional quality), the debt instruments issued by the Greek, Portuguese, Irish, and Spanish governments were effectively as safe as the debt offered by the Germans. (The reduction in currency risk under the umbrella of the euro, to the extent that membership in the common currency zone is irrevocable, goes some distance toward rationalizing this belief, of course.) The sudden and unexpected loss of confidence in the market convention that Greek debt was essentially indistinguishable from German or Dutch debt triggered the crisis, which spread beyond the Greek epicenter to other eurozone members. A central element of the policy response at the supranational level to the crisis as it evolved has been to try to rebuild the confidence of the investment community in the precrisis convention. Policymakers and scholars working on the European debt problem would do well to look again to Keynes for insight. His sensitivity to the social and political foundations of financial orders has been sorely lacking in the contemporary debate, and a dose of Keynesian thinking might prove useful in creating durable solutions to our most pressing policy problems.

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## NOTES

1. The discrepancy in Greece's budget was partly a product of bad record keeping and intentional misreporting; it was also facilitated by newfangled financial market innovations developed by Wall Street bankers. Goldman Sachs and JP Morgan helped move some of Greece's spending off the books in a series of deals that offered cash to the government, ponied up by the banks, in exchange for the right to securitize revenue streams from landing fees at the country's international airports, highway tolls, and the national lottery. Story et al., 2010.

2. Blyth 2013, 79.

3. Chinn and Frieden 2011, 187.

4. Greece's economy only accounted for 2,5 percent of the total eurozone GDP, but by 2010 eurozone banks were exposed to \$206 billion in Greek sovereign debt. Blyth 2013, 72, 86.

5. Buck 2015, March 2.

6. Krugman 2015. Ireland, like Greece, has transferred large sums to bondholders living elsewhere. To remain current on a debt burden that shot up (in three years) from under one-third to nearly one and a half times its total economic output, the Irish "will be transferring nearly 10 percent of its national income as 'reparations' to the bondholders, year after painful year." Eichengreen, 2010.

7. Skidelsky 2009, xvi.

8. Kirshner 2014, 41; 2009, 530.

9. Samuelson 1991, x; Mundell and Johnson quoted in Vogelgsang 2014, 22.

10. Schuker 2014, 588.

11. Keynes 1919, 190.

12. Kirshner 2009, 532–34; Keynes 1919, 262.

13. Keynes 1937; see also Latsis et al. 2003.

14. Keynes 1937, 214.

15. Wolf 2014, 47.

16. Keynes 1919, 126–33.

17. Ibid., 174.

18. Ibid., 187–88 (italics in the original); see also Trachtenberg 1980, 108.

19. Keynes 1919, 249, 233.

20. Keynes 1922, 122.

21. Ibid., 74.

22. Ibid., 157.

23. Ibid., 79.

24. Keynes 1926, 271.

25. Schuker 2014, 586.

26. Keynes 1926, 272.

27. Ibid., 273, 275.

28. Ibid., 275.

29. Ritschl 2012a, 8; Schuker 2014, 586.

30. As Ritschl puts it, "Transfer protection implied that at the central bank's foreign exchange window, transfers of dividends and interest on commercial loans would take precedence over transfers of reparations. This had the effect of making reparation recipients the residual claimants on German foreign exchange surpluses" (2012b, 6).

31. Keynes 1929a, 3.

32. Schuker 2014, 586; Keynes 1929c, 405.

33. Ohlin 1929a, 1929b.

34. Trachtenberg 1980, 79.

35. Keynes 1929a, 6. In counterpoising the view of economies as "sticky masses" against the classical mode of treating economic adjustment as smooth and highly fluid, Keynes here took a key first step toward what would become the "Keynesian revolution" in macroeconomics (Skidelsky 2003, xxviii, 248).

36. Keynes 1929c, 406.

37. When Fritz Machlup circulated a draft of a collection of his favorite writings in international economics, a colleague questioned the inclusion of work on the transfer problem, calling it a "dead issue" of interest only to historians (Ormazabal 2010, 486).

38. Krugman 1999, 463.

39. Including the former Greek finance minister, Yanis Varoufakis, who in 2012 posted an article on his widely read blog that interpreted the eurozone crisis through the lens of the transfer problem. <http://yanisvaroufakis.eu/2012/04/21/german-mercantilism-and-the-failure-of-the-eurozone-guest-post-by-heiner-flasbeck/>.
40. Ohlin 1929a, 176.
41. Hausmann 2015.
42. Feld et al. 2015.
43. Keynes was particularly sensitive to the political consequences of austerity: “a situation may not unlikely arise in which no German government which obeys the behests of the transfer committee can retain the votes of the electorate” (1926, 273).
44. Quoted in Gillian Tett, “A Debt to History?” *Financial Times*, January 16, 2015.
45. Shambaugh 2012, 167–68.
46. And that is after the 2012 voluntary debt reduction wiped out obligations amounting to 47 percent of Greece’s GDP.
47. Eichengreen and Temin 2010, 382.
48. Keynes 1919, 190.
49. See Nelson and Katzenstein 2014.
50. Davidson 1991, 131.
51. Kindleberger 1987, 220.
52. IMF 2013, 16.
53. Keynes 1937, 213.
54. Riles 2011, 159.
55. Beckert 2013a; see also Beckert 2013b and Riles 2011, 169.
56. Keynes 1937, 222.
57. Kirshner 2009, 533.
58. Keynes 1919, 262–63.

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