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## *Financial flows across frontiers during the interwar depression*

By HAROLD JAMES

In explaining the interwar depression, a new scholarly orthodoxy, dominated by 'a striking degree of consensus', has recently emerged.<sup>1</sup> In large part it is a modern restatement of the widely held contemporary view that after 1922 the operation of the restored international gold standard (or, more properly, a new gold exchange standard) created a pattern of linkages that left the world's economies vulnerable to deflationary shocks emanating from the restrictive monetary policies of France and the US.<sup>2</sup> The gold 'sterilization' of these countries in response to gold and exchange inflows restricted domestic monetary expansions which might have balanced the contractions that were taking place elsewhere.<sup>3</sup> Through their policies France and the US prevented the realization of any effective international cooperation, and crippled the international financial system. Removing the shackles of the gold standard thus became the most important prerequisite for world recovery.

The primary transmission mechanism for these shocks was international financial mediation. Money flows transferred deflation across frontiers, and thus dramatically reduced purchasing power in other economies.<sup>4</sup> This in turn led to the collapse of international trade, to which the worldwide movement to increase tariffs and otherwise restrict trade through the implementation of quota systems was merely a response (rather than being a primary cause of the international depression). This new history of depression is, in its account of causation, above all a monetary history.

The central part of this explanation lies in the financial shocks of 1931 and 1932 which intensified the deflationary spiral. There are two major puzzles in both the traditional and the modern accounts. First, the international simultaneity of the shock to different national monetary systems requires explanation. What constituted the linkage? Secondly, what forces prevented the international monetary system from returning to equilibrium? This is a question about investors' attitudes and the effects they had in limiting the options available to policy-makers. In classic accounts of the gold standard, interest rates provided the central adjustment device, yet in the interwar period rate rises often failed to attract new flows, and instead worked as a negative signal. The Governor of the Banque de France, Clément Moret, put the point clearly when he stated: 'There is a psychological factor

<sup>1</sup> Eichengreen, 'Origins and nature', p. 213.

<sup>2</sup> See for instance Henry Strakosch, supplement to *Economist*, 9 Jan. 1932.

<sup>3</sup> Eichengreen, 'The Bank of France'; Eichengreen and Sachs, 'Exchange rates'; Temin, *Lessons*, pp. 21-3.

<sup>4</sup> Friedman and Schwartz, *Monetary history*, pp. 359-60.

that entirely escapes the action of the Banque. Movements of capital are today determined, less by differences in interest rates than by the greater or lesser security they offer.<sup>5</sup> When capital movements occurred, 'motivated by the desire to profit by, or avoid loss from, expected exchange movements', the effect on the world economy was, as Haberler pointed out, severely deflationary: 'While the flow of funds will cause a considerable reduction in investment in the countries from which it comes, it will be largely sterilized in those to which it goes.'<sup>6</sup>

Both these problems about the operation of the interwar gold standard have in the past been answered, in a cavalier manner, with a single word: 'confidence'. In the modern literature, 'confidence' is merely replaced by another term: 'credibility'. 'Credibility' concerns the ability of policy-makers to act in accordance with their stated policies and with an underlying policy regime. In the context of the 1920s, that regime was the restored international gold standard, the measure of 'credibility' was 'confidence', and the indicator of the failure of 'credibility' financial panic.

The purpose of this article is to investigate the nature of the interconnectedness of European economies. What role did investor psychology play? And what were the circumstances which moulded it?

## I

In Europe after 1931, financial and banking crises spread across national frontiers, demonstrating an apparent degree of coordination that surprised and puzzled many commentators.<sup>7</sup> The transmission mechanism involved was rarely direct capital links. In the most famous case, the Austrian crisis around the Creditanstalt in May 1931 is supposed to have provoked the German bank collapse of June-July, although the extent of German financial involvement in Austria was very limited, and it would be impossible to argue that the Austrian developments directly weakened German institutions.<sup>8</sup>

Several alternative hypotheses suggest themselves, the first is a rational, but non-monetary explanation. Bank crises were responses to general macroeconomic conditions. The worldwide price decline for many commodities after the mid 1920s affected financial institutions because it reduced the value of banks' collateral. In this case, the primary origins of depression lie clearly outside the financial sector.

The second hypothesis draws on the psychological theories of investment behaviour current at the time. There existed an international psychology of crisis which provided the transmission mechanism. This was the language familiarly used at the time: financial stability depended on a 'confidence' or market sentiment, which governments were unable effectively to control or manipulate. Such a psychology might undermine government attempts at monetary stabilization. In 1933 Keynes, while appealing for greater 'national self-sufficiency', acknowledged this as the principal difficulty in making

<sup>5</sup> Banque de France (B.d.F.), Paris, Conseil Général Procès-Verbaux, 27 Nov. 1930.

<sup>6</sup> Haberler, *Prosperity and depression*, p. 441.

<sup>7</sup> See Bernanke and James, 'The gold standard'.

<sup>8</sup> See Kindleberger, *World in depression*, p. 148.

contra-cyclical policy: 'Advisable domestic policies might often be easier to compass, if, for example, the phenomenon known as the "flight of capital" could be ruled out.'<sup>9</sup> The gold standard depended above all on the assumption of 'confidence', but the panic psychology it generated in the 1920s made this an ever more elusive quest.

The third alternative is a modern variant of the second, and concerns an explanation of the motives involved in panic. Specifically, the gold standard encouraged large speculative movements once a fear became prevalent among investors that there might be a departure from gold. 'Credibility' meant ensuring that a commitment to a specific market parity was convincing to market psychology by limiting the scope for policy actions to those measures possible within the gold standard regime. In this setting, exchange rates, and an assessment of the probability of their alteration, would matter much more than relative interest rates, and the classical steering mechanism of the gold standard (discount rate changes) would become ineffective.

Here a fourth explanation is suggested—that interpretation of the domestic budget positions of gold standard countries held the key to calculations about 'confidence' and exchange rate structures. Budget deficits threatened a likely departure from gold, not just because there may have been a fear of the repetition of the inflations and hyper-inflations that had ravaged Europe in the immediate postwar period, but because investors and portfolios had not adjusted to a fundamental shift in the character of indebtedness. In particular, increased public deficits could not be accommodated easily by financial markets. The results was to increase the volatility of these markets.

## II

This point becomes clearer by means of a comparison between the extent of interwar international capital movements and those of the pre-1914 period. It was not so much that new or unprecedentedly large capital movements were taking place in the 1920s. In absolute terms, the flow was actually reduced in comparison with the prewar years, but it responded in a newly volatile fashion.

This phenomenon was often described as flight of capital. 'Capital flight' is a fundamentally political term, and one man's concept of flight may be interpreted by another as simply a normal capital export.<sup>10</sup> Looking at the interwar period in a longer term perspective, its capital flows scarcely justify the more emotive descriptions of orgies of lending and massive debt problems. The overall flows of the 1920s were smaller rather than greater than the prewar movements: for 1911-3, the average annual capital export of Britain, France, Germany, and the US to the rest of the world was \$1,400 million. In the period 1924-8, when capital flows were at their greatest, the annual figure was \$860 million (or \$550 million in prewar prices).<sup>11</sup>

There is a dramatic contrast between the prewar world, in which short-

<sup>9</sup> Keynes, 'National self-sufficiency', p. 236. For the relationship of market psychology and Keynesian thought, see Middleton, *Towards the managed economy*, p. 162.

<sup>10</sup> Machlup, 'Die Theorie der Kapitalflucht'.

<sup>11</sup> Lewis, 'World production', p. 130; United Nations, *International capital movements*, p. 25.

term capital movements were still primarily concerned with the financing of trade, and the larger movements of the postwar world. There are no reliable estimates for prewar global short-term indebtedness, but the figures available for individual countries indicate much lower levels than for the 1920s. Britain, by far the largest short-term creditor, had assets of \$1,715 million, while Germany had \$240 million and the US \$450 million in liabilities.<sup>12</sup> For 1930, the Bank for International Settlements estimated the total world short-term indebtedness as 70,000 million Swiss francs or \$13,500 million, of which Germany accounted for \$3,900 million, the US for \$2,700 million, and the UK for \$1,900 million. Of this total, only \$4,300 million related to strictly commercial transactions: the implication left by the B. I. S. figures was that the rest was 'hot money', that reacted to political crises.<sup>13</sup>

The high short-term indebtedness of the US and Britain, despite their overall status as creditors, reflected their attractions as a haven for deposits, often originating from the major capital importing countries. This development represented a counterflow, in which capital exports to central Europe, Germany, or South America were re-exported by the borrowers.

Contemporary calculations of hot money flows—based largely on guesswork built around rather unreliable figures for trade and reported capital flows—seem at first rather high. In Germany in 1930, capital moved out since 1926 was estimated at 9,000 million marks, representing around one-eighth of NNP or twice the volume of the German note issue. For France in 1938, capital flight constituted an estimated one-quarter of national income, or 88 per cent of currency in circulation. Even for the much larger US, the estimates of capital flight in 1933 in the aftermath of the dollar's departure from gold suggest 18 per cent of note issue.<sup>14</sup> It is scarcely surprising that figures of these magnitudes alarmed contemporaries, and led in Germany, France, and the US to political movements built around opposition to alleged capitalist conspiracies.

The political motivation of interwar capital movements has become a familiar part of the literature. In 1924, the French government blamed pressure on the franc on German speculation. The German government and the German Central Bank believed that the runs on the mark during the Paris experts' conference in spring 1929, and again after the September 1930 parliamentary elections, were the result of French intrigue. The political crisis of August 1931 in Britain was interpreted as a 'bankers' ramp' mounted by American financial institutions in league with the City. The French press, as well as the French intelligence service, believed that Germany was behind the repeated runs on the franc after 1933.<sup>15</sup>

<sup>12</sup> Bloomfield, *Short-term capital movements*, pp. 71-82.

<sup>13</sup> Bank of England (B.o.E.), London, OV50/6, Oct. 1936, F. G. Conolly (B.I.S.) memorandum, 'International short term indebtedness'.

<sup>14</sup> These estimates of 'capital flight' are taken from contemporary sources: for Germany, James, *German slump*, p. 298; for the US, Federal Reserve Bank of New York (F.R.B.N.Y.), New York, Harrison papers 2010.2, 22 Nov. 1933, Crane memorandum on telephone conversation between Harrison and Roosevelt; B.o.E., OV31/23, 25 Sept. 1933, Sprague memorandum for Clay; 12 Dec. 1933, Jacobsson to Niemeyer; for France, Drummond, *London*, pp. 45-6

<sup>15</sup> Philippe, *Le drame financier*; Frayssinet, *La politique monétaire*; Schuker, *End of French predominance*, pp. 55, 94; James, *Reichsbank*, p. 77; Williamson, 'A bankers' ramp?'; on France in the 1930s, French Ministry of Finance, Paris, B18675, 2 Apr. 1936, memorandum of État Major de l'Armée, 2<sup>e</sup> bureau.

In each case, the element of truth in these over-politicized interpretations lay in the belief of the financial community that government budget deficits—even of a comparatively modest size—provided the critical signal of serious underlying economic difficulties. This was in part a lesson learnt as a result of the inflationary and hyper-inflationary experiences of the early 1920s, when the running of deficits and their financing through monetary expansion appeared to be ‘a sort of post war Finance Minister’s drug habit’.<sup>16</sup>

The threat to stability could come in two forms: either that there would be a buyers’ strike in the bond market and an inability of government authorities to roll over the substantial volumes of their outstanding short-term debt; or that the government would preempt the first threat by expanding the money supply and resorting to inflationary finance. Either of these developments threatened policy makers’ ability to continue to act in accordance with the requirements of their policy regime, and in this way undermined ‘credibility’. The first of these explanations has been developed as a theoretical model for debt crises by Alesina, Prati, and Tabellini, and applied in the case of France in the 1920s by Prati. A similar mechanism has been used by Balderston to explain the limitations on German fiscal room for manoeuvre in the later 1920s.<sup>17</sup> This approach has a particular applicability where capital markets were destabilized by recent experience of inflation.

The interpretation of the size of acceptable public sector deficits influenced the rest of the financial structure. Initially this was the mechanism of propagation of financial crisis in central Europe, where as a result of capital inflows to promote reconstruction after inflation, business debt had expanded. From 1926 to 1930, the indebtedness of business corporations as a proportion of owned capital remained steady or fell in the US (from 65.9 to 60.9 per cent) and in Britain (from 58.0 to 50.3 per cent), while these ratios increased dramatically in central Europe. The Hungarian ratio rose from 69.3 to 80.3 per cent, and the German ratio from 65.1 to 81.9 per cent.<sup>18</sup> Rising business indebtedness did not attract substantial adverse comments, investor worries, or a panic psychology. Government deficits, however, did; and the behaviour of public sector debt profoundly affected, through the panic mechanism, the market for private debt. Budget deficits rose inevitably in the depression, as tax and other revenues fell off, and as social spending requirements rose. The fiscal response to depression proved to be a major source of financial instability, which in turn intensified the depression.

In the course of that panic, a fundamental and very rapid liquidation of short-term debt occurred. In 1930 the B. I. S. had estimated short term indebtedness as 70 billion Swiss francs. Its later calculations showed total international short-term indebtedness to have fallen to 45 billion Swiss francs at the end of 1931 and 32 billion at the end of 1933 (and its contemporary

<sup>16</sup> League of Nations (L.O.N.), Geneva, Salter papers S123, April 1924, ‘Notes on currency questions’.

<sup>17</sup> Alesina, Prati, and Tabellini, ‘Public confidence’; Prati, ‘Poincaré’s stabilization’; Balderston, ‘German capital and labour markets’.

<sup>18</sup> League of Nations, *World economic survey, 1932-3*, pp. 137-8.

figures demonstrated an even more dramatic decline: to 30 billion by the end of 1931).<sup>19</sup>

### III

The interaction of fiscal and debt crises became clear with the episode that led to the general European, and then world, panic: the failure in May 1931 of the largest Austrian bank, the Vienna Creditanstalt. It failed for two fundamental reasons: its bad debts, and the fall during the depression of the value of its security portfolio.<sup>20</sup> As it was by far the largest Austrian bank and had become in effect a holding company for the Austrian economy, its difficulties inevitably had far reaching implications. In a narrow sense, the problems of the Creditanstalt had nothing to do with the difficulties of financing government in Austria during an economic downturn, but the Austrian banking crisis became a general crisis of 'confidence' because of the implications of the Creditanstalt affair for the national budget.

The losses of the bank were underestimated in May 1931, and calculations of the total continued to mount throughout the year. The accounts published on the night of 11 to 12 May revealed losses of 140 million Austrian schillings; by mid June the figure was 500 million, and at the end of the year it had risen further to 923 million (or two-thirds of the Austrian budget for that year).<sup>21</sup> These sums were to be covered by purchases of Creditanstalt paper by the National Bank with a government guarantee. Thus the Creditanstalt's losses would widen the government's budget deficit. Rescuing the banking sector involved the 'socialization of debt'—the transfer of liabilities from the private to the public sector. Given the example and the precedent of the early 1920s inflation, such a transfer destabilized the markets. This new debt could not be absorbed by the domestic market unless it further liquidated commercial credit, which would obviously be highly counter-productive as a way of salvaging the financial system. Only money creation appeared as an alternative to default on both foreign and domestically held debt. The possibility that Austria might be pushed off the gold standard became a self-fulfilling threat. Withdrawals from Austria took place across the exchanges, and threatened the entire banking structure (not just banks with a weak reputation) as well as the country's ability to transfer exchange and thus its commitment to the gold standard.

Even in early May 1931, before the Creditanstalt's difficulties became public knowledge, leading financial opinion makers such as the house of J. P. Morgan in New York were alarmed by the predictions of a large Austrian budget deficit for 1931. In France, one of Austria's major creditors, even socialist newspapers complained about the inflated size of the 'hypertrophied' Austrian state, and all French investors became more nervous.<sup>22</sup> French, but also central European, funds were moved internationally. France

<sup>19</sup> B.o.E. OV50/6, Conolly memorandum; B.I.S., *Third annual report*, p. 11.

<sup>20</sup> See Nötel, 'Money, banking and industry', p. 162; most recently, Stiefel, *Finanzdiplomatie*.

<sup>21</sup> The audited account: L.o.N. C88, 3 Oct. 1931, Deloitte Plender Binder to Austrian Minister of Finance.

<sup>22</sup> Kunz, *Battle for Britain's gold standard*, p. 47; *L'Avenir*, 10 May 1931.

became a major centre for funds moving out of central Europe: some indication of the extent to which the French market became a shelter for flight capital is given by the rise in private deposits at the Banque de France during the central European panic: from 11,884 million French francs on 27 March 1931 to 15,187 million francs in July.<sup>23</sup> The rise represents an addition of \$128 million: by coincidence, almost exactly the amount of the international B. I. S. and Central Bank credits given to support the Hungarian and German central banks (\$125 million).

Could greater international cooperation have stopped the Creditanstalt crisis? Such cooperation would have involved the allocation of foreign funds to the Austrian state or to its central bank, and alleviated the exchange position but at the same time allowed the run on the Creditanstalt and the transfer out of private funds to continue for longer. It would thus have increased the problems of the Austrian authorities in dealing with the domestic situation. Cooperation without a complete overhaul of Austria's financial system was consequently believed to be ineffective. The eventual resolution of the Creditanstalt crisis involved two parallel processes, both directed by foreigners as representatives of the creditor countries. While the Dutchman Adrianus van Hengel supervised the reconstruction of the Creditanstalt, another Dutchman, Rost van Tonningen, was appointed by the Financial Committee of the League of Nations to control the Austrian budget and ensure the implementation of a harsh austerity programme.

The lesson of the Creditanstalt collapse was that budget deficits and bank collapses were causally linked, and that withdrawals across the exchange posed a double threat, to internal financial stability and to gold standard maintenance. The logic of Austria became that of other crisis bound central European countries. In Hungary, which like Austria had been the subject of a stabilization imposed by the League, the budget had been strained by the institution of a rebate ticket scheme on agricultural products, the *boletta*, designed to maintain wheat prices in the face of the worldwide collapse, as well as a wheat buffer stock programme, the *futura*. As the President of the Hungarian National Bank confessed, some time before the beginning of the banking crisis: 'the fact that such a situation could remain undisclosed until so late a stage argued a lack of financial control and administrative organization which could not be denied.'<sup>24</sup> In addition, there were huge deficits in the accounts of publicly owned enterprises.

The budget difficulty, as interpreted by investors, led to a movement of funds out of Hungary. This run was tackled by the Hungarian authorities in a rather more imaginative way than in Austria, in part because it was recognized from the first movements of money that a general crisis of confidence was involved. There were signs of similar developments to those which had shaken the Vienna banks, as current accounts in the major Budapest banks fell and banks consequently started to withdraw credits to their major customers, pushing up the bankruptcy rate.<sup>25</sup> The run on

<sup>23</sup> B.d.F. Conseil Général Procès-Verbaux.

<sup>24</sup> B.o.E. OV 33/79, 9-10 Feb. 1932, H. A. S[iepmann] note on conversation with Dr Popovics.

<sup>25</sup> B.d.F. Hungary 22 June 1931, McGarrah to Moret; B.o.E. G1/306, 6 June 1931, Popovics cable to Norman.

Budapest banks had less to do with specific weaknesses in their portfolios than with a general fear of the reaction that would be produced by the publicity surrounding the budget deficit. In that sense, it was not purely a banking problem. The Hungarian National Bank kept its commercial banking sector liquid by a generous policy of discounting bank bills. The result was that the outflow of funds from Hungarian institutions could continue across the exchanges, so that the major part of the strain fell on the external exchange rather than on the Hungarian institutions. This prompted foreign creditors to agree to a standstill, or voluntary debt freezing agreement, for Hungarian debt.

The fear of public insolvency played a significant part in the German banking crisis of June and July 1931. Again, as in Austria, there was mixture of specific worries about particular banks (especially the losses resulting to the Darmstädter- und Nationalbank as a result of its lending to Nordwolle) with a wider reaching calculation. A fear that the government was unable to finance its (relatively small) deficit and its problems in making cash payments, together with difficulties in local and state governments, prompted a run on deposits, which forced the closure of Germany's leading banks.<sup>26</sup> The run on deposits took the form of withdrawals across the exchanges, and the rapid depletion of the Central Bank's international reserves.

Germany had a large share of the world's cross-national short-term deposits. After Germany, the international panic spread to those other countries with large short-term liabilities, Britain and the US. Though the history of the capital markets in Britain and the US was completely different from those in Germany, and though there had been no traumatic Anglo-Saxon postwar inflations, the reactions and the arguments about the origins of weakness that resulted from the panics show a substantial similarity to the earlier drama of central Europe. Once again, it was the budget and the question of how it might be balanced that preoccupied financiers.

In Britain, the extent of the likely budget deficit had been at the centre of public debate at least by the time of the German crisis, which further increased awareness of the destabilizing effects of budget deficits. In early 1931, the House of Commons Public Accounts Committee had already been warned that the central budget was severely unbalanced.<sup>27</sup> The result was the appointment of a committee on national expenditure, the May Committee, which reported on 31 July. A memorandum written in late July by Sir Richard Hopkins, the Controller of Finance and Supply Services in the British Treasury, stated:

We cannot control that we are in the midst of an unexampled slump, nor the fact that Germany is bankrupt, that great assets of ours are frozen there, and that foreign nations are drawing their credits from there over our exchanges. Nor can we control the fact that foreign nations have immense sums of money in London and will try to get them away if distrust of the pound extends . . . . The first thing at which foreigners will look is the budgetary position.<sup>28</sup>

<sup>26</sup> James, 'Causes of the German banking crisis'.

<sup>27</sup> See B.o.E. G15/28, 20 Sept. 1943, H. C. Mynors, note of a talk with Sir Horace Wilson.

<sup>28</sup> Cited by Cairncross and Eichengreen, *Sterling in decline*, p. 64.

In particular, foreign opinion interpreted the report of the Macmillan Committee (published, by coincidence, on the date of the general German bank closure, 13 July) as a plea for inflationism. The Committee had recommended measures to halt 'the violent downturn of prices, the effects of which upon political and social stability have already been very great', and it criticized the choice of parity at which Britain had returned to the gold standard in 1925.<sup>29</sup> The Governor of the Banque de France believed the Macmillan report to be a plea for 'a managed inflation, in the form of authorization of the Bank of England to increase the note issue'.<sup>30</sup> Foreign investors apparently shared this opinion, and the withdrawals started immediately. Whereas in early July, movements of gold from Germany had stayed in London, after 13 July London too was affected. In the period 12-22 July, according to the Banque de France, Britain lost £20 million, of which half went to France, £6 million to the Netherlands, and £4 million to Switzerland (other traditional safe havens for capital flight).<sup>31</sup>

Concern about the British budget raised the issue of Britain's role as a global financial intermediary, and sterling's position as a unit of account. As in central Europe, two related issues were involved: the stability of a currency facing international drains, and the stability of banks threatened both by a run on deposits and by the freezing of their assets. As in the previous crises of 1931, the double dilemma required not simply a measure that would allow banks to continue in business, but a remedy to halt the external drain that also threatened the position of the banks.

The major investments of French banks in central Europe, for instance, went through the City of London. Between 1928 and 1931, the four leading French banks had accumulated total foreign balances of between 5,000 and 6,000 million French francs (\$200-230 million), of which an estimated two-thirds were in sterling. But the Bank of England's internal investigation of the distribution of French funds in London concluded that of the French sterling balances, only 10 per cent were actually invested in the short-term London market, and the rest were re-lent to central Europe.<sup>32</sup> As early as May 1931, the New York market had been swept by rumours about the difficulties of major London banks (the Governor of the Federal Reserve Bank explicitly named Barclays, Schrodgers, and Rothschilds). After July, Lazards, Barings, and Schrodgers were close to bankruptcy, and Lazards needed a credit line from the Bank of England.<sup>33</sup>

The double necessity of defending banks and protecting sterling explains the highly peculiar path of British official policy prior to devaluation. Although the Bank of England helped to arrange in August a privately financed credit for the British government through J. P. Morgan New York (a loan whose conditions brought down the Labour Government) the Bank did not use the additional reserves it had gained in this way in any attempt

<sup>29</sup> *Committee on Finance and Industry*, p. 92.

<sup>30</sup> B.d.F. Conseil Général Procès-Verbaux, 16 July 1931.

<sup>31</sup> *Ibid.*, 23 July 1931.

<sup>32</sup> B.o.E. OV 45/81, 12 Dec. 1930, H. A. S[iepmann] memorandum for Mr Powell.

<sup>33</sup> B.o.E. OV32, 18 May 1932, Harrison cable to Norman. See also Diaper, 'Merchant banking', pp. 69-71; Boyce, *British capitalism*, pp. 344-5.

at a defence of sterling in September. Neither did it raise the bank rate in early September, as it should have done under the conventions of the gold standard, and as French and American creditors had urged.

The combination of these two official inactivities, over the use of the exchange from the Morgan credit and over the bank rate, made the Bank of England's policy look alternately incoherent or defeatist. One recent analyst concluded that the only explanation must be that the abandonment of the gold standard had been secretly prepared well in advance by the Bank.<sup>34</sup> But there is no direct evidence to support this suggestion. The eventual depreciation of sterling on 21 September 1931 was indeed the necessary result of a systematic inertia, but its motivation was different. The experience of central Europe had showed the impotence of discount rate policy in halting an external run. More importantly, this was also a potential banking crisis. Using the foreign exchange from the Morgan credit would have allowed the withdrawals of short-term deposits from London banks to continue without affecting the exchange, and would have led to a situation in which a massive and politically embarrassing support operation for the affected London banks would become necessary.

Already on 27 July, Hopkins had told the Bank of England's policy-making body, the Committee on Treasury, that the City faced the danger of a run. At this meeting, the views of the British clearing banks were also reported: they opposed any foreign Central Bank credit to the Bank of England which would allow the Bank of England to continue to make gold shipments that would be financed from the withdrawal of deposits in London banks.<sup>35</sup> Although eventually foreign credits were taken, they were not used, an inactivity that was in full accordance with the spirit of the clearing banks' observations and requests.

Devaluation appeared to be a way of stopping the external drain on British banks. This was the immediate rationale, rather than a response to the general problems of depression or an attempt to deal with Britain's trading position. By letting the currency depreciate, and at the same time maintaining the commitment to a balanced budget, the one-way possibility of a large *future* fall in the sterling parity would be removed and replaced by the possibility of a rise or a fall, or of greater stability. There would no longer be an attraction in liquidating sterling deposits in British banks in order to move funds across the exchange. Without the devaluation, drains on the banks would have continued until the outbreak of a major banking crisis.

The effect of British depreciation in September 1931 involved the exporting of the confidence problem. The US was now clearly the outstanding international short-term debtor left on the gold standard. It faced the threat of a withdrawal of deposits. Despite its favourable trade balance in the depression, a risk of an attack on the dollar emerged. With this, the same combination of a potential threat to the currency and an actual threat to the banking system (as deposits were withdrawn) had the same repercussions in the US as it had had in continental Europe.

<sup>34</sup> Kunz, *Battle*, pp. 132-4, 185-8.

<sup>35</sup> B.o.E. G14/316, 27 July 1931, minutes of Committee on Treasury.

In late 1931 and 1932, a new wave of bank panics hit the US, as the numerous internal weaknesses of the banking structure were amplified by an international drain. What happened is shown clearly by the weekly gold statements prepared, but not published, by the Federal Reserve Bank of New York (F.R.B.N.Y.). There were some outflows in July 1931, as the extent of American banks' involvement overseas became apparent, but the large outflows started with the intensification of the sterling crisis of September. Gold was earmarked for European central banks in the week ending 21 September, and in October big outflows occurred: in successive weeks \$61.5 million in gold was shipped to France (in the week ending 5 October), then \$89 million, \$42.6 million, and \$53.9 million. The 1 per cent discount rate increases imposed by the F.R.B.N.Y. on 9 October and 16 October had little effect in stopping the drain, but contributed significantly to the worsening of domestic business conditions.<sup>36</sup> The lesson of Europe, that discount rate changes were not an effective policy instrument, was being absorbed in the US.

There was a new round of drains in January and February, then a brief lull until April, when the outflows were resumed at the same time as a major group of bank failures occurred in the midwest. The Federal Reserve System's initial answer to the panics of 1932 was to inject new liquidity through open market purchases. It was an approach similar to that adopted by the Hungarian authorities in 1931: that the domestic banking system should be saved, even if this meant providing the resources which would let the external run continue. By April 1932 increased liquidity had become the explicitly acknowledged programme of Governor George Harrison of the F.R.B.N.Y.<sup>37</sup> As a strategy for fighting credit deflation, however, it was dramatically unsuccessful: the bank collapses continued in an explosive crescendo until March 1933.

The generally accepted explanation of the ineffectiveness of the open market programme emphasizes the institutional resistance to Governor Harrison's programme within the Federal Reserve System.<sup>38</sup> A more compelling cause of the failure lay in the expectations of the international market, which interpreted the purchases of government securities as inflationary, and as a signal to continue the run. Unlike the Hungarian case, there was no immediate *de facto* departure from gold in response to the new policy through a mix of capital controls and bank standstill agreements; and neither was there a devaluation. But the threat was clear. In January 1932, a former Federal Reserve banker, economics professor, and popular journalist, Parker Willis, circulated reports of American fiscal irresponsibility in the influential periodical *Agence Economique et Financière*. The reaction was that major American institutions started to 'bear the dollar', and by June 1932 the Bank of England struggled with private Americans sending gold to London for safe keeping.<sup>39</sup>

<sup>36</sup> The gold outflows are reported in F.R.B.N.Y., 'Japan' country file.

<sup>37</sup> F.R.B.N.Y. C261, 13 April 1932, Harrison cable to Norman.

<sup>38</sup> Most systematically set out in Friedman and Schwartz, *Monetary history*, pp. 347, 384-8.

<sup>39</sup> F.R.B.N.Y. C261, 27 May 1932, Knoke-Kay telephone conversation; 4 June 1932, Harvey cable to Harrison.

In fact there appeared to be powerful analogies between the position of the US and the by now painfully familiar imbroglio of central European finance. The nervousness about public finance started in 1931, when Congress overrode a presidential veto to pass the Veterans' Bonus Bill, with the explicit purpose of injecting an additional purchasing power of \$1,200 million. This expenditure appeared in the budget, and 1931 was consequently one of the most expansionary accounts in the whole interwar period, with the differences between government revenues and expenditures running at some 5 per cent of GNP (or 3.6 per cent of full employment GNP).<sup>40</sup> Throughout the summer of 1931, estimates of the federal deficit rose. By autumn, the consequences of government debt issue for the securities market had become a part of the explanation for bank weakness. This was the message delivered in December 1931 by the Committee on Progress of Public Works of the President's Organization on Unemployment Relief: new issues of government bonds would 'cause serious declines in the market values of the present outstanding low-yield issues . . . . It may well be that one result would be a considerable number of additional bank failures.'<sup>41</sup> The panic of April-May 1932 focused specifically on the raised projections for the 1932 deficit (announced on 3 May),<sup>42</sup> and a budget balancing bill in June calmed the panic, but only temporarily.

Immediately after the presidential campaign of 1932, the effect of Democratic campaign promises to balance the Federal budget meant substantial gold inflows, but by the beginning of the new year, the fear that the US might abandon gold prompted a new series of outflows. Between 1 February and 14 March 1933 the F.R.B.N.Y. lost three-fifths of its gold reserves. Since it was US banks that were losing deposits, and since domestic depositors reacted to the news, a fresh round of bank failures resulted.<sup>43</sup> This predicament was the major theme of foreign advice and warning. In February, the Governor of the Bank of England called the Federal Reserve's attention to the 'flood of dollar offerings' in London. By early March, the London market interpreted the run and the need for the bank holiday as a sign that 'we [the USA] were already off or else we were going off the gold standard'.<sup>44</sup> The result was a pronounced outflow of capital, a substantial proportion of which went to France.

Immediately on assuming office, Roosevelt needed to decree a banking holiday. The quick answer to bank panics lay less in institutional banking reform—which would take time—than in the deliberate use of uncertainty about the dollar's value to reduce the level of speculative flows. This stance provided the 'bombshell' of 3 July 1933, in which Roosevelt announced that the US had no intention of stabilizing the dollar. The presidential message quite deliberately destroyed the chances of international economic cooperation on exchange matters at the 1933 London World Economic Conference.<sup>45</sup> Its

<sup>40</sup> Brown, 'Fiscal policy', pp. 865-6.

<sup>41</sup> Barber, *From New Era*, p. 120.

<sup>42</sup> F.R.B.N.Y. Harrison papers 3117.2, 20 May 1932, Hambro-Harvey telephone conversation.

<sup>43</sup> This case is argued convincingly in Wigmore, 'Bank holiday'.

<sup>44</sup> F.R.B.N.Y. 3115.4, 24 Feb. 1932, Harrison-Norman telephone conversation; C261, 6 March 1932, Hambro-Crane conversation.

<sup>45</sup> Kindleberger, *World in depression*, p. 216.

aim was not only to increase US domestic prices, but also to reduce capital movements by creating greater uncertainty, as a central element of the new policy became the view that the world's problem lay in excessive capital movements.

The main lesson of the depression and of the outflows of 1933, according to the American interpretation, was that capital flows and international lending weakened the US economy and limited the room for manoeuvre in budgetary policy. Ending this constraint required a reduction of the capital flows that made the international economy so sensitive. The point was very emphatically made already in late 1932 by the Harvard economist John H. Williams, the US representative on the Financial Subcommittee of the Preparatory Commission for the World Economic Conference, and a committed advocate of the gold standard and fixed parities:

The United States are [*sic*] not economically a creditor country: there is an adverse balance in the invisible item of the US balance of payments (tourist traffic and immigrant's remittances). The US became a creditor country as a result of the War: but the massive exports of capital were a mistake, and it may be anticipated that exports of capital in the future will be on a limited scale.<sup>46</sup>

Responses to crisis in central Europe and then in Britain and the US all involved the same calculation, which required belief in a limitation of the scope for money and capital movements to destabilize domestic economies. And as fewer countries remained open to capital movements, those countries felt the destabilizing effects more profoundly.

US policy deliberately shifted attention to France, and to the French budget. Roosevelt was quite proud of this new turn in the direction of international financial nervousness, which he attributed to US dollar policy. It was, he said of the French, 'their own fault inasmuch as they had not balanced their budget for three years and that it was unavoidable that because of their budgetary situation something of this sort would have had to develop'.<sup>47</sup> In 1931 and 1932 France, with a gold currency backed by massive reserves, appeared to offer what the Governor of the Banque de France had already in 1930 termed 'a currency of refuge'.<sup>48</sup> But this led to considerable problems for French monetary policy. The increased gold reserves that had resulted from the big inflows of 1931 and 1932 could not be used as a basis for domestic expansion, because there existed a strong likelihood that the sums would be moved out again. What would occur should the capital flows be reversed, and French banks be affected by massive withdrawals by foreign depositors? At the same time the monetary surplus could be interpreted as offering a temptation of responding to the world economic crisis by expanding; and this was exactly the kind of belief that would destabilize markets. Such a reverse flow had already begun in December 1932, and after this all the major banks lost deposits, were threatened by illiquidity, and survived only by discounting paper at the Banque de France.

<sup>46</sup> L.O.N. R2672, 4 Nov. 1932, minutes of meeting of financial sub-committee.

<sup>47</sup> F.R.B.N.Y. Harrison papers 2010.2, 22 Nov. 1933, memorandum on 21 Nov. 1933 Harrison-Roosevelt telephone conversation.

<sup>48</sup> B.d.F. Conseil Général Procès-Verbaux, 27 Nov. 1930.

The large French budget surpluses following the franc stabilization of 1926 also helped to create the impression that there were plentiful funds available for new spending projects. By the budget year 1930-1, there was a small deficit; and it grew larger during 1931. By late 1932, the budget was the subject of fiercely politicized debates in the French Assembly. The difficulties of borrowing in the long-term market forced the French government to resort to the issue of Treasury bills, which increasingly were not taken by the public or the banks, but instead needed to be rediscounted by the Banque de France.<sup>49</sup>

The deposits of the four large French banks, which fell between 1932 and 1936 from 21,000 million francs to 15,300 million, again give an indication of the extent not so much of French domestic problems as of the external drains facing France.<sup>50</sup> When bank deposit withdrawals threatened the French credit structure, the Banque de France increased its rediscounting in order to keep the French banks liquid: but this made resources available for outward movements over the exchanges. In this way, the Banque, while propping up the French banking structure, actually fostered the flight of capital from the country.

The only response to this dilemma was to attempt to remove the source of the speculation by promoting confidence, and this required reducing the budget deficit. But soon this policy of deflation, followed with more or less rigour by all the governments between 1932 and 1936 (with the partial exception of the Flandin ministry in 1935), also had its perverse effects on economic stability.<sup>51</sup> Observers soon realized that political attempts to stabilize the budget were contentious and divisive, and that deflation, by undermining political stability, also reduced confidence in the franc. By 1935, this interpretation had gripped the foreign exchange markets: 'London circles were explaining the softness of the French franc as due to the drastic measures which the French cabinet proposed to take in connection with its supplementary budget and which might well lead to a split in the cabinet.'<sup>52</sup>

The previous reaction to financial panics had been the belief that deficits needed to be avoided because they caused capital flight, which threatened the commitment to gold and also internal financial stability. Now it appeared that avoiding budget deficits produced the same effects on market psychology. With this, the last argument for gold in the last bastions of the gold standard crumbled.

#### IV

Uncertainty about public budgets thus played a central role in undermining the stability of the interwar financial system. During the depression, a vicious circle had emerged, linking budget deficits to assessments of exchange rate stability, the resulting capital flows to withdrawals of deposits from banks, and subsequent bank failures and crises in turn to budget problems. It is

<sup>49</sup> Mouré, *Managing the franc*, pp. 166, 190.

<sup>50</sup> *Mouvement économique*, p. 203.

<sup>51</sup> See in general Jackson, *Politics of depression*.

<sup>52</sup> F.R.B.N.Y. 261, 16 May 1935, Knoke-Cariguel telephone conversation.

important to note that this effect was not only visible in countries with harsh experiences of inflation or hyper-inflation in the aftermath of the First World War. It was equally evident in countries such as Britain or the US which had not suffered this particular postwar trauma. This suggests that the origins of the problem do not lie in particular political cultures which reacted allergically to the prospect of a repetition of inflation. At first this conclusion is extremely puzzling. Why should exactly the same calculation apply in France, the US, and Britain, where capital markets existed which should have been perfectly capable of financing government deficits in the depression, as in countries in Latin America and central Europe, where capital markets were either inadequately developed or had been destroyed by inflation?

France and the US ran what were by contemporary standards very high central budget deficits under a gold standard regime during the depression: the US in 1931 and France from 1932. Britain, on the other hand, despite the intense political debate of 1931, in an international comparison looked highly responsible and even restrictive (table 1). Worries about a potentially expansive budget in a gold standard regime were enough to cause the major crisis of August-September 1931, but no actual bank collapses of the kind experienced in the US, France, or in the other gold standard countries, Belgium and Switzerland.

Table 1. *Central state surpluses/deficits as a proportion of GNP (per cent)<sup>a</sup>*

	<i>Austria</i>	<i>Belgium</i>	<i>France</i>	<i>Germany<sup>b</sup></i>	<i>Hungary</i>	<i>Italy</i>	<i>UK</i>	<i>US</i>
1928 <sup>c</sup>	-0.7		+1.6	-1.2	+0.2	0.0	+0.4	+0.8
1929	+0.2		+1.6	-1.6	-0.5	-0.3	-0.3	+0.7
1930	-2.2	-4.4	-0.1	-2.1	-3.6	-3.4	-0.5	-0.5
1931	-3.1		-0.9	-0.1	-3.2	-4.5	0.0	-3.2
1932	-0.2		-2.9	-0.4	-2.2	-3.8	-0.7	-2.3
1933	-2.6		-5.3	-0.2	-1.5	-8.7	-0.4	-3.6
1934	-2.5	-2.6	-4.5	-1.0	-1.5	-2.3	+0.2	-4.0

Notes: <sup>a</sup>GNP for Belgium and Hungary; national income for France

<sup>b</sup>Net increases in central government debt, from *Konjunkturstatistisches Handbuch 1936*, p. 171. This series does not include tax certificates (after 1932) or Mefo-Bills (after 1933), for which, however, there existed no formal market.

<sup>c</sup>For Austria, Belgium, and also for France until 1929 and after 1933, the budget year coincided with the calendar year. For Germany, the UK, and France in 1930/1 and 1932/3 the budget year ran from 1 April to 31 March. For Hungary, Italy, and the US, the budget year ran from 1 July to 30 June.

Sources: League of Nations, *Public finance, 1928-1935*; GNP from Mitchell, *European historical statistics*; *Annuaire statistique de la France*.

An explanation of the increased vulnerability of finance to politics lies in the overall expansion of public debt relative to the prewar era. One dramatic difference between the pre- and postwar worlds was the extent to which debt structures were dominated by public sector liabilities.

The primary cause of the relative rise of public sector debt was the war. Absolute figures for public sector debt rose dramatically: in the UK, for instance, unredeemed public debt increased more than tenfold between 1914 and 1920 (table 2). These rises were particularly dramatic where there was no substantial inflation to reduce the real value of government liabilities.

In other countries, especially in central Europe, the value of the public debt was reduced by the effects of monetary inflation. But even in these

cases, the same effects reduced the worth of private liabilities (notwithstanding the fact that in legal stabilization settlements, different rates of revaluation were often applied to private and public liabilities). The public/private mix also showed a fundamental shift, albeit not as great a movement as in the case of non-inflationary economies.

Table 2. *Public debt as a proportion of nominal capital of joint stock companies (per cent)*

Year	UK	Germany
1914	622	189
1930	6,764	221

Source: calculated from Mitchell and Deane, *Abstract*, p. 203; Balogh, *Studies*, p. 281; *Deutsches Geld- und Bankwesen*, pp. 294, 313.

The increased share of public sector debt in the liability structure thus occurred everywhere (though to different extents), despite previous experience of inflation, and the markets responded in similarly nervous ways to these shifts. The need to finance government debt payments also affected the new issues market, which frequently determined market expectations much more directly than the absolute quantities of circulating debt. Absorbing new debt issues posed difficulties because of the reduced savings ratios that resulted in part from the redistribution of wealth and savings of the war and postwar periods, and in part, in those countries with experience of inflation, from the memory of the past losses.

If the new public debt could not be absorbed by the long-term market, larger amounts of short-term debt would circulate. These created considerable problems, and directly caused the peculiar reactions of 1920s markets to central bank discount rate changes (subsequently, fear of devaluation played a greater role). Increasing discount rates as a protective measure at a time of exchange rate difficulties would depress the value of financial issues. If this reduction was anticipated by foreign or domestic markets, they would attempt to move their funds from securities into bank deposits. In selling government securities, they would oblige the central bank to absorb the government paper. This would make sums available for the purchase of foreign exchange, intensifying rather than alleviating the exchange problem. This was the phenomenon that was subsequently interpreted and denounced as capital flight.<sup>53</sup> It affected the Bank of England after the return to the gold standard in 1925, but also the policy of the Banque de France.

The French case shows clearly how during the first half of the 1920s, and again in the depression, after 1931, public debt dominated the new issues market (table 3). This was interpreted, not as a signal for confidence, but rather as the opposite. It became more difficult to sell public sector debt, and the risk premia increased. By contrast the stabilization period, between 1926 and 1931, was stable precisely because of the reduced claims made on the market by the public sector.

<sup>53</sup> For a discussion of this process, see Cairncross and Eichengreen, *Sterling in decline*, pp. 50-1.

Table 3. *France: share of public debt in total new issues (per cent)*

1919	89.0	1928 <sup>a</sup>	58.9
1920	89.4	1929	—
1921	74.4	1930	—
1922	78.5	1931	—
1923	75.7	1932	48.0
1924	47.0	1933	54.6
1925	82.3	1934	57.4
1926	34.7	1935	67.6
1927	51.3	1936	80.7

Note: <sup>a</sup>After 1928, the figures include debt withdrawals; from 1929 until 1931 there were no net debt issues.

Sources: *Indices généraux*, p. 134; *Mouvement économique*, p. 201.

The French data show a considerable narrowing of the gap between yields on public and on private bonds after the war. Public bond prices fell relative to industrial or railway issues: thus a 3 per cent *rente* was quoted in 1927 at 65.1 per cent of its 1913 price, while 3 per cent railways were 74.4 per cent and industrials 76.5 per cent. By 1931 the prices had moved much closer to the 1913 relationship, and then—after the onset of depression—*rente* prices rose relative to industrials and railways. A similar fall in the price of state bonds relative to mortgage bonds occurred in Germany, and is usually explained by a sharp fall in the willingness of the German domestic investing public to purchase these bonds.<sup>54</sup> The difference between the rates is an indicator of the degree of financial nervousness: in 1924 industrial and private mortgage bonds yielded less than state paper, but by 1929 state bonds had recovered. In the crisis of 1931, the yield on mortgage bonds was again substantially below that on state bonds (8.73 per cent and 9.23 per cent respectively on 9 September).<sup>55</sup>

Difficulties in selling government debt arose in part out of market conditions, and from the increased supply of debt. But there was also a much more politicized aspect of the uncertainty: worry about public sector finance raised questions about social distribution. The politics of spending and taxation became much more contested in the interwar years than had been the case earlier. Would tax increases be forthcoming to service the ever more expensive debt? Or would increased taxes raise demands for more extensive redistribution to combat social inequalities, and in this way further politicize the fiscal process?

## V

The supposition that interwar monetary and financial problems originated primarily from the growth in government debt and the vulnerability of the debt structure to political processes and decisions was sufficiently widely accepted to figure prominently in contemporary attempts to formulate responses to depression.

A first obvious reaction to a trauma that affected financial markets that

<sup>54</sup> *Indices généraux*, p. 130; *Mouvement économique*, p. 199; Balderston, 'Origins', p. 510; *idem*, 'German capital and labour markets', p. 161.

<sup>55</sup> Döring, 'Kreditmärkte', p. 395.

were highly integrated across national frontiers was to limit the extent of international linkages. Devaluation alone was often insufficient to achieve such an uncoupling, and capital controls, frequently associated with voluntary freezings of debt, were required to break the tie with the world economy, and to institute what Hayek termed 'monetary nationalism' ('the doctrine that a country's share in the world's supply of money should *not* be left to be determined by the same principles and the same mechanism as those which determine the relative amounts of money in its different regions or localities').<sup>56</sup>

A second response involved limiting international linkages as a method of restricting the usable information available to those moving capital. A far more drastic—and apparently quite successful—approach led simply to the suppression of usable financial information. It has recently been pointed out just how effective an anti-cyclical strategy this proved to be in Mussolini's Italy. Italian banking, as a mixed or universal system, was in many contemporary judgements<sup>57</sup> as vulnerable as the structures of Austria, Hungary, or Germany. Mussolini's government responded in a manner possible only under an authoritarian regime: the suspension of publication of regular accounts of balances and assets, coupled with capital controls, prevented the outbreak of an Italian banking crisis in 1931-2.<sup>58</sup> Even extraordinarily large public deficits (which in 1933 reached 8.7 per cent of GNP) could not shake the banking system.

A third, and potentially even more far-reaching method of responding to the peculiar nature of the interwar crisis was to attempt to instil confidence by removing the state and its budget from public debate and criticism. This approach aimed at the creation of a consensus about the desirability of state activity. A national community, motivated by suitable propaganda, would provide a more enthusiastic acceptance of public debt. This was the intention of authoritarian regimes and dictatorships of the radical right, which believed that national community would solve the economic problem. In Germany, the National Socialists in the 1930s explicitly regarded the willingness of the German public to buy government securities either directly or through banks as a plebiscite on the regime. Alternatively, in a different, and progressive, version of the same strategy, a new consensus could be created by the expansion of the state's activity to build a new and better social community. This was the approach of the Belgian socialist Henri de Man, as well as the stance of the French Popular Front.

## VI

The diagnosis frequently made of the interwar period involved the assertion that there was too much international capital movement. This was highly misleading as analysis, and the political theory and economic doctrine

<sup>56</sup> Hayek, *Monetary nationalism*, p. 4.

<sup>57</sup> For instance, the Swiss banker Felix Somary, who believed that the world economy could not recover before the pound left gold, and before the German and Italian banks collapsed: Institut für Zeitgeschichte, Munich, Hans Schäffer diary, entry for 27 Jan. 1931.

<sup>58</sup> Toniolo, *L'economia*, pp. 228-33.

generated as a response provided the basis for political authoritarianism and economic nationalism. The problem should better be understood as lying in a changed debt structure that made it much more difficult to accommodate international capital movements. The vulnerability affected not only economies with extreme inflationary experiences, but also—and more destructively from the standpoint of international stability—the major centres of international finance in London, Paris, and New York. Between 1931 and 1933 they were thus open to a fundamental shock that brought down the world financial system and all hopes for international cooperation.

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