

**Economic Statistics in the Weimar-era Reichswirtschaftsministerium, the
Statistisches Reichsamt and the Institut für Konjunkturforschung**

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Wherever we look in the world, the modern apparatus of economic statistics dates to the first half of the twentieth century. The Weimar Republic built one of the most elaborate modern systems of economic data-gathering, which the Nazi regime inherited and further elaborated.¹ Though the work was done by the Statistisches Reichsamt (SRA), the RWM was its parent Ministry. One might be tempted to dismiss this statistical activism on the part of the SRA and the RWM as unsurprising. It was German cameralists after all who gave us the modern word “Statistik”. And was Germany not the model of organized capitalism in the early twentieth century? But, no one who has spent any time looking inside the Reichswirtschaftsverwaltung either side of World War I is likely to hold long to such clichés. The story of the Reich’s statistical apparatus in the early twentieth century is not that of a self-confident, well-established “strong state”. The story is one of failure, crisis and massive reconstruction. From the outbreak of World War I, through to the end of the Weimar Republic and into the Third Reich, the economic administration of the Reich resembled a dynamic and disorderly building-site more than a settled, well-established bureaucratic edifice.

The overall effect of the investment in statistics made by the Weimar Republic between 1919 and 1933 was to create a system that was larger, more sophisticated and more influential than ever before. Statisticians became more than mere chroniclers of national development. They mattered in an immediate sense to the exercise of power. But though this new influence flattered the statistical establishment, it also created a destabilizing dynamic. Data-gatherers were caught uncomfortably between a stance of detached technical authority, which required neutrality and objectivity, and a logic of

¹ A. Tooze, *Statistics and the German State 1900-1945. The Making of Modern Economic Knowledge* (Cambridge, 2001).

engagement and influence that pushed them towards taking responsibility (and taking it from others), and even towards more or less overt partisanship. They faced a peculiarly acute version of a more general dilemma affecting modern governmental experts – whether they be soldiers, lawyers, engineers or scientists – all the more acute for the fact that the technical expertise of statisticians was knowledge-production. As a result, in the death throes of the German democracy in the early 1930s statisticians would feature not merely as chroniclers or casualties of the crisis, but as advocates of crisis-fighting policy and as part of the coalition that smoothed the path for Hitler’s accession to power.

I. World War I and the Crisis of German Official Statistics

Unlike its parent ministry the RWM, the SRA and its predecessor the Kaiserliches Statistisches Amt (KSA) had a historical pedigree to look back on.² It had been formed in 1872 at the foundation of the Reich. It coordinated and collaborated with Laender offices that had histories that stretched back to the early 19th century. Since the 1870s, the KSA had been subordinated to the Interior Ministry but on the whole cultivated a studied detachment from the immediate priorities of government. After a brief burst of reforming energy between the 1840s and the 1870s, personified by the economist and statistician Ernst Engel, German official statistics had stagnated. Surveys were limited and slow-moving. The main activity of the statistical offices was the preparation and execution of gigantic censuses of population, occupation and workplaces. Accounts of imports and exports were registered at the customs posts. Modest forays were undertaken into “labour statistics” from the 1890s. But the Willhelmine state’s attitude to the trade unions was too ambivalent for this to go far. And despite the furore over tariff policy, industry was too protective of its privacy to yield more than limited enquiries into production. The main preoccupation of the statisticians was to preserve an Olympian claim to *Wissenschaftlichkeit*, by avoiding any offensive enquiries. When the war broke out the KSA was caught completely unprepared.

² Michael C. Schneider, *Wissensproduktion im Staat. das königlich preussische statistische Bureau 1860-1914* (Frankfurt a.M. Campus, 2013).

Looking back on his efforts to mobilize the German war economy in 1914, Wather Rathenau liked to illustrate the necessity for action with a story about the inadequacy of official statistics. Recounting his rescue of the German war effort to the Deutsche Gesellschaft in Berlin, Rathenau told the story as follows:

‘It was the middle of August [1914]. ... The first question facing us was the question of supply. We needed to know for how many months the country was supplied with essential materials. On this hung every measure. The opinions of industrialists contradicted each other and in some cases differed by a factor of ten.’ ‘I asked an important official agency: Is it possible to get statistics on this question? ‘Certainly’ I was told, ‘such statistics can be made’. When? [Rathenau asked] ‘In about six months’. And if I need the numbers in fourteen days, because the matter is urgent? To this, I received the reply: ‘Then you will have to do without [the statistics].’³

For Rathenau the inadequacy of this response was a token of the need to side step the official bureaucracy and to build a new war industrial apparatus on the expertise of German industry. Meanwhile, for the KSA the war went from bad to worse.⁴ Its staff were deemed surplus to requirement and drafted. The publication of official data was banned under provisions of wartime secrecy or because they were deemed inessential. Meanwhile, the reputation of statistics as such was ruined by the amateurish efforts of wartime authorities that sought to extract crucial information from resentful and uncooperative interest groups. The War Office carried out not one but two botched censuses, one of population and the other a hugely complex survey of workplaces. If official statistics had come to rest since the early nineteenth century on a delicate balance of restraint and trust between statisticians, officialdom and the general public, that balance was destroyed by the war. Nevertheless, the demand for data was insatiable and as the war gave birth to the new Ministries for Labour, Food and for the Economy, they began competing to control the KSA. The fact that the renamed SRA was ultimately allocated to the RWM was indicative of the new priorities. Germany’s official statisticians would continue to collect demographic data and data on many aspects of

³ W. Rathenau, *Deutschlands Rohstoffversorgung* (Berlin, 1917), p. 11-13.

⁴ BAB, R 3101/6031, Bl. 109, ‘Das SRA in der Kriegswirtschaft’, (1919).

German social life.⁵ But from World War I onwards it would be economic and financial statistics that dominated its work. Indeed, it was in the war and its aftermath that a distinct notion of “the economy” took shape both as an object of knowledge and policy, an object that could then be disentangled from concepts such as social policy. How this would be allocated in bureaucratic terms, however, was far from obvious.

As the war ended the renamed SRA sought to reassert itself administratively. In December 1918 the President of SRA sent a request to the Reichswirtschaftamt, the Reichsamt des Innern, the Reichsschatzamt, the Reichsbank, the Reichsernaehrungsamt and the Kriegsministerium asking them to report on their wartime statistical work.⁶ Soon the SRA was struggling to wade through hundreds of statistical surveys and mountains of original returns that flooded in from agencies as diverse as the Kriesgausschuss der Rohpappen und Dachpappen-Industrie and the Reichskommissar zur Eroerterung von Gewalttaetigkeiten gegen deutsche Zivilpersonen in Feindesland.⁷ Most egregious was the Kriegsministerium, which brusquely informed the RWM on 13 March 1919 that it was abandoning work on the Betriebszaehlung that it had carried out entirely without consultation with the KSA on 15 August 1917. The socialization commission wanted the complete data, but the Treasury had cancelled the budget. The Kriegsministerium was closing down its statistics department and a new tenant was expecting to take over its office buildings on 31 March. Included in the job lot of statistical material were the millions of returns produced by that other great fiasco of wartime statistics, the census of 1 December 1916, which the Kriegsministerium itself admitted had yielded no meaningful results.⁸ Struggling to handle the flood of unprocessed and incoherent material, the KSA decided to distribute the returns to the major municipalities in the hope that they might be both interested and knowledgeable enough to make something of the failed censuses.

Meanwhile in the period of the armistice that Troeltsch would later describe as a “Traumland”, the public were clamouring for clarification of Germany’s real conditions. On 16 January 1919 the centrist social democrat Richard Calwer in his *Wirtschaftliche*

⁵ *Das Konstrukt 'Bevoelkerung' vor, im und nach dem 'Dritten Reich'*, hrsg. von Rainer Mackensen und Juergen Reulecke, Wiesbaden 2005.

⁶ **BAB, R 3101/6038, Bl. 119.**

⁷ BAB, R 3101/6038, Bl. 171-214.

⁸ BAB, R 3101/6038, Bl. 158.

Tagesberichte bewailed the state to which economic statistics had been reduced by the war - “die Wirtschaftsstatistik in einen trostlosen Zustand versetzt worden.”⁹ “Noch immer wird in der Weise gearbeitet, dass ploetzlich von irgend einer amtlichen Stelle eine Mitteilung gemacht wird, in der irgend eine Behauptung aufgestellt wird, die man ohne weitere sachliche Begrueundung gutglaeubig hinnehmen soll ... aber man weiss ja allmaechlich hinlaenglich, dass das Wissen der Behoerden selbst so unzureichend ist und sein muss, dass man derartige Mitteliungen nie ernst nehmen kann.” It was vital to resume normal statistical publication so that the public could judge for themselves. “[...] dabei kann es freilich nicht bleiben, die Wirtschaftsstatistik, deren Tiefstand sich im Kriege gezeigt hat, muss den Beduerfnissen des praktischen Lebens entsprechend verbessert werden.” This was a task for the Reichswirtschaftsamt in the interests of ensuring that “die wirtschaftliche Berichterstattung ... nicht wieder in der Qualitaet der Vorkriegszeit oder gar der Kriegszeit ... nicht wieder bloss als Tummelplatz zur Irrefuehrung der oeffentlichen Meinung, sondern ein Spiegelbild der Wirklichkeit bietet...”

It was significant, however, that though Calwer called for the Reichswirtschaftsamt to take responsibility for a new era of economic information he did not mention the SRA. The structure of the German state was in flux. The RWM’s backing of *Gemeinwirtschaft* created a new tier of decentralized agencies that could be used to gather information. In January 1919, the Reichsstelle fuer Textilwirtschaft, which was a lead element in the conception of *Gemeinwirtschaft* designs drew up an elaborate statistical agenda.¹⁰ As a headline grabbing policy *Gemeinwirtschaft* was not to survive the summer of 1919. But its industrial agencies lingered on, and their last hurrah in statistical affairs came in the winter of 1920-1921. At short notice the RWM found itself facing an insistent demand from the London reparations conference that it should produce an overall estimate of German industrial production both before and after the war. This was not a question that the pre-war KSA had ever dared to ask, or one that the improvised organization of the wartime period had ever had the coherence to pose. In early 1921 it could no longer be postponed.

⁹ BAB, R 3101/6038, Bl. 118 Richard Calwer, *Wirtschaftliche Tagesberichte* 16 Januar 1919.

¹⁰ BAB, R 3101/6022, Bl. 5, 19-42.

On Saturday 12 February 1921 all the trade associations and organizations of industrial self-administration (Selbstverwaltungskeperschaften) were circularized by the RWM with a questionnaire asking for production in 1913 by weight and value, an estimate of all intermediate and raw materials used, the value and weight of export sales, the value of prewar production capacity, the number of workers employed and the maximum capacity of production in 1913. For the postwar period the questionnaire asked for current capacity on the assumption that all necessary labour and raw materials were available, the share of this capacity that was uncompetitive with foreign competition, the share that was currently in use, the value and tonnage of exports in 1920s. The answers were to be supplied by Monday 14 February and would be compiled in the Ministry that evening. Despite considerable unease within the Ministerial bureaucracy at the speed with which the numbers were compiled, they were communicated to the German delegation at the London reparations conference on February 17 1921. They presented an unprecedented overview of the pre- and postwar conditions of production in Germany. The data compiled were considered so sensitive that they were never published. They were circulated only to the elite coalition of business leaders that helped to compile them. And they were all returned by numbered list by early March 1921.¹¹ The net estimate for industrial production in 1913 came to 16.1 billion Mark. A later estimate put agriculture at 13.27 bn. For 1920 the experts consulted by the RWM estimated that agricultural production was one third and industrial production 40 percent down.¹²

Insert Table 1 here

Perhaps not surprisingly given the extraordinary effectiveness of this polling procedure, the responsible section in the RWM attempted to make the enquiries begun in February 1921 into a regular event. But when they were repeated they attracted the attention and resistance of the Reichsverband der Deutschen Industrie (RDI). What was being attempted surreptitiously, the Reichsverband pointed out, was nothing less than a complete statistics of production. It announced that it would resist this effort and asked instead for direct negotiations with the RWM.¹³ Over the following weeks it became clear that the statistical initiative within the RWM in fact did not have the backing of the

¹¹ BAB, R 3101/8778, Bl. 329, R3101/5781, Bl. 13., R 3101/14897, R 3101/5778, Bl. 191-193.

¹² BAB, R 3101/6036, Bl. 57-59.

¹³ BAB, R 3101/5781, Bl. 81-82.

statistical section of the ministry (I/7) headed by Professor Dr Ernst Wagemann or the SRA. The regular statistical authorities had been sidelined by the pressure of urgency.¹⁴ There would be no repeat. On 24 September 1921 state secretary Hirsch himself intervened to require all Fachsektionen to report any statistical needs immediately to Wagemann who would assess whether they could be answered by existing data or required new surveys.¹⁵ The need for caution in making calls on the Verbaende for information was acknowledged at the end of 1921. The effort to mount a production statistics by stealth had failed: “Der hoffnungsvoll begonnene Versuch konnte aber ... nicht zu Ende gefuehrt werden. ... Die Geschaeftsfuehrer der Verbaende haben fast durchweg mitgeteilt, dass die Fragen nicht mehr beantwortet werden koennen, da die Mitglieder der Verbaende sich hierzu ohne gesetzlichen Zwang nicht bereit finden; ...” By the end of 1921 the RWM had arrived at sceptical conclusions about the availability of data in the Verbaende themselves. “Dass die Fachverbaende produktions- und sonstiges wirtschaftsstatistisches Material ueber dasjenige hinaus, dass sie dem Ministerium geben, noch fuehren, glaubt die Sektion nach ihren Ermittlungen bezweifeln zu sollen. Es besteht auch gegenuebern den Leitern der Fachverbaende ein weitgehendes Misstrauen der Mitglieder; insbesondere wird der Umfang der Produktion durchaus als Geschaeftsgeheiminis angesehen.” The RWM was left to point out that enquiries along precisely these lines had been conducted in the USA with great success.¹⁶ In 1921 it was an open question whether any agency in the Weimar republic would have the resources or ambition necessary to do so.

A year earlier on 13 August 1920 the RWM had set out its long-range agenda for the SRA at an inter-Ministerial conference.¹⁷ The meeting drew an impressive crowd. The Ministry, as the parent of the Reich's Statistical Office, sent no less than ten representatives, including State Secretary Hirsch and two Ministerial Directors. All the branches of the Reich's new national economic administration were represented. Both the Foreign Office and the Reich's Health Office were on the list. For official statisticians this was an unmissable event. The officials and statisticians mingled with some of the most

¹⁴ BAB, R 3101/5778, Bl 313-314.

¹⁵ BAB, R 3101/5778, Bl. 315.

¹⁶ BAB, R 3101/5778, Bl. 322-325.

¹⁷ BAB, R 39.01 Film 37081/10550, RWM, 'Besprechung über die Reorganisation der deutschen Reichsstatistik im RWM 13.8.1920'.

important interest groups in Weimar politics. The Zentral-Arbeitsgemeinschaft der industriellen und gewerblichen Arbeitgeber- und Arbeitnehmerverbände Deutschlands (ZAG) was represented as were the Verein deutscher Eisen- und Stahlindustrieller (VdESI) and the Verein deutscher Ingenieure. The Allgemeiner Deutscher Gewerkschaftsbund (ADGB) sent its chairman, Carl Legien, a well-known statistical enthusiast. In the second Empire, official statistics may have enjoyed a better reputation, but they were of no immediate significance to the leading men of government. Now, they concerned some of the most influential men in the land. Official statistics had become a problem. As State Secretary Julius Hirsch acknowledged, 'the need for a reform of the Reich's statistics [has] been clear for a long time [...] During the war the Reich's statistics were unable to meet the demands placed on them by the central authorities'¹⁸ At the August 1920 conference the agenda set out by Regierungsrat Platzer one of the energetic young officials in the SRA, was modest but focused and pragmatic.¹⁹ What was required were national figures indicating the price level, the level of wages, not a comprehensive survey of production, but at least data for key industries, the state of Germany's foreign trade and the Reich's financial accounts. The state of German agriculture was a matter of life or death. However, given the level of resentment and mistrust in the countryside, there was simply no hope of obtaining reliable information by conventional statistical means. Government would have to rely on more forceful administrative enquiries.

The August 1920 meeting gave an impression of the interests at stake. And it was from that meeting that we can date the reconstruction of the statistical system as a concerted project of the RWM. But in the early years of the Weimar Republic statistical reform like every other aspect of government reform faced an uphill battle. Major surveys like the census were postponed until the mid-1920s. Surveys of wages were attempted but were too slow moving to be of much use under inflationary conditions. The full range of obstacles that stood in the way of the development of the statistical apparatus in the early Weimar republic can best be studied by focusing on three series: price statistics, trade statistics and the question of national income and production.

¹⁸ Ibid, p. 3.

¹⁹ BAB, R 39.01 Film 37081/10550, 'Referat Dr Hans Platzer bei der Besprechung vom 13.8.1920.

Improvisation 1920-1924

Price statistics were one of the most glaring deficiencies of the system inherited from the Wilhelmine era. Though the Prussian military in 1912 had called for a system to allow them to make proper accounting of regional costs, the Länder were not able to agree on a common set of standards before 1914.²⁰ At the end of the war, the issue could no longer be dodged. Centralized collective wage bargaining could not do without an authoritative guide to price movements.²¹ Municipal statisticians in industrial cities such as Berlin, Magdeburg, Leipzig, Cologne, Nürnberg and Mannheim began publishing their own estimates.²² By 1922 one municipal statistician commented: ‘not without justification one speaks of index number mania ... Such numbers, ... have shot out of the ground like mushrooms after a mild summer's rain, and the volume of comment on index numbers ... has become quite unmanageable.’²³ What was needed was a running report on the cost of living for the Reich as a whole, conceived of as a national average, against which to compare these local numbers.

Lacking all experience the SRA spent four months, in the late summer and autumn of 1919, puzzling with the Ministries and the representatives of labour over the mechanics of the new survey.²⁴ Finally, on 18 November 1919 the Reich's Statistical Office despatched copies of a new questionnaire.²⁵ The survey covered foodstuffs, the cost of fuel and rents. The weighting scheme was based on surveys of working-class budgets last taken in 1907. As of 10 December 1919, the local magistrates in all towns with more than 10,000 inhabitants, slightly over 600 in total, were to report prices to the Statistical Office of their Land. To check against manipulation, local committees representing employers and labour countersigned the returns. The Länder Statistical Offices compiled regional aggregates. By early February 1920 the Reich's Statistical Office was in possession, for the first time, of a national figure for the cost of living. The

²⁰ GStA 1. HA Rep. 77 3893 No. 101-220.

²¹ BAB, R 39.01/10668, Bl. 3 RAM report on Tarifamt und Lohn (Preis-) Statistik, 31.7.(1919) and No. 142-152 and BAB, R 39.01/10658, Bl. 145-6 and 212.

²² For a critical review see C.L. Holtfrerich, *Die deutsche Inflation 1914-1923* (Berlin, De Gruyter, 1980), 24-43.

²³ BAB, R 39.01/15, Bl. 13 *Mitteilungen des Statistischen Amtes der Stadt Leipzig*, NF, Heft 4, p. 4.

²⁴ BAB, R 39.01/10668, Bl. 14, 45, 57, 103.

²⁵ BAB, R 39.01/10668, Bl. 145 SRA to SLa 18.11.1919.

survey was repeated monthly thereafter.²⁶ But despite, or rather because of the interest from the public, the National Assembly and the corporatist interest groups, the Labour Ministry refused to allow publication until the survey could be vouched for as reliable.²⁷ It was not until August 1920 that the national price figures for February 1920 were released to the German public.²⁸ An up to date monthly index based on the prewar standard did not begin to be published until April 1921, by which point the index stood at 13 times its prewar level.²⁹

Coping with inflation was a question of adaptation. The strategic economic policy question from 1919 onwards was the reparations question.³⁰ The Versailles treaty had mandated that reparations should be fixed in relation to Germany's capacity to pay. The question how to establish the answer to that question. This involved a series of important conceptual and analytical distinctions. But in the final analysis it was a matter of fact. And much of the politics of reparations turned on the question of this matter of fact. It was therefore a question of statistics. The question was which statistics.

The starting point for almost all discussion from the allied side, following the lead of John Maynard Keynes in *The Economic Consequences of the Peace*, were estimates of national income, wealth and annual savings produced before the war by Karl Helfferich.³¹ As one official in the RWM commented, the "Beurteilung nach der gesamten Produktionskraft der deutschen Volkswirtschaft beherrscht seit Friedensschluss die oeffentliche Meinung des Auslandes." As the Germans remarked "diese Methode geht davon aus, dass das deutsche Volksvermoegen als solches oder seine Ertraegnisse in ihrer Gesamtheit fuer die Bemessung der Leistungen entscheidend sei."³² As the tone of the German comments suggests this was not an obvious choice. One could instead have pointed to the surplus of tax revenues, or the balance between imports and exports. These data were to hand and they suggested that Germany was too poor to pay. National income

²⁶ BAB, R 39.01/10669, Bl. 135 SRA to SLa 29.1.1920 and R 39.01/10658, Bl. 5 RAM to SRA 15.5.1920.

²⁷ BAB, R 39.01/10669, Bl. 221, 237 and R 39.01/10658, Bl. 1, 4, 16, 19, 94.

²⁸ BAB, R 39.01/10658, Bl. 98 SRA to RAM 10.8.1920 and Ibid. Bl. 108 and 109 RAM, Press Release 'Teuerungsstat' 25.8.1920.

²⁹ *Wirtschaft und Statistik* (WuS) 1 (1921), Heft 1 vom 20.1.1921, p. 20.

³⁰ In place of an enormous literature G.D. Feldman, *The Great Disorder: Politics, Economics and Society in the German Inflation, 1914-1924* (Oxford, OUP 1993).

³¹ J.M. Keynes, *Economic Consequences of the Peace* (London, Macmillan 1919) 175-208.

³² BAB, R 3101/14823, Bl. 232-244.

figures on the other hand were not only extremely difficult to compile, but they were subject to vast discrepancies according to different models of valuation. There was substantial disagreement between experts both allied and German as to what German national income amounted to and how much of it could be mobilized. Down to this day there is no absolute consensus amongst historians on this issue.³³

But what is striking about the arguments of this period, is not just the range of factual disagreement, but the way in which over the course of the reparations debates, macroeconomic concepts and statistics like national income became ever more indispensable as reference points. This was a process. Helfferich's prewar estimates had been part of a controversial prewar debate over taxation and the gloomy visions of immiseration proffered by the social democrats. In the aftermath of World War I estimates of national income were to establish themselves as something more than argumentative interventions. They were to become governing facts, institutionalized as defining parameters of the government. But this factual grid was not present at the outset. It emerged in the course of a process. One can see this particularly clearly with regard to the question of how to gauge not just Germany's income in 1920 but its future capacity to pay.

A popular idea in the reparations discussion that began in 1920 was to structure payments into two components. At the Reparations conference at Spa, 5-16 July 1920, the Reich offered a combination of a basic annuity topped up with a variable element linked to the improvement in Germany's own conditions. This idea that derived from German bankruptcy law was known as a *Besserungsschein*.³⁴ But this triggered an urgent discussion about how any *Besserung* should be measured. In early August 1920 the economist Moritz Bonn was charged by the Foreign Office with working out a schema.³⁵ On 14 August 1920 Bonn set out a so-called *Indexschema*, a statistical index that would measure the prosperity of Germany and allow reparations to be adjusted to Germany's capacity to pay. What Bonn did not do was to suggest that Germany measure its national

³³ For an overview of estimates see A. Ritschl, 'The Pity of Peace: Germany's Economy at War, 1914–1918 and Beyond', in Broadberry and Harrison (eds.), *Economics of World War I* (Cambridge, CUP, 2005), 44.

³⁴ BAB, R 3101/14887, Reichsminister der Finanzen VE 5169 26 August 1920.

³⁵ BAB, R 3101/14887, Zu Nr. Gf. 31 Niederschrift ueber die Besprechung im AA 7 August 1920. BAB, R 3101/14890, Buttlar an Reichskanzler (RK) 7978.

income. Instead, he proposed an index based on five categories: measures of heavy industrial production, consumption (of raw materials and mass consumer goods), savings, turnover figures and transport data. A given year, say for instance 1926, would be set as the normal year. The components would then be set at 100 in relation to that year and simple averages formed for each of the five components and then of all five components in an aggregate index.³⁶ It was an index scheme much in the manner of the business-cycle indicators made fashionable at the time by the Harvard Committee on Economic Research.

The Reichsfinance Ministry immediately responded to Bonn's suggestion with a series of memos of its own. The RFM considered a variety of different options including an index of German foreign trade, customs revenue, the cost of living, movements of the market price of German bonds on key foreign markets, tax revenue. But it rejected all of these as flawed. By far the best measure would be some index of the "Ueberschuss der volkswirtschaftlichen Produktion ueber den Verbrauch". "Ein theoretisch richtiger Massstab der Leistungsfahigkeit Deutschlands waere eine genaue Produktionsstatistik. Dieselbe muesste allerdings die ganze Produktion Deutschlands in allen Erscheinungsformen erfassen. Eine solche Produktionsstatistik ueber die gesamte Volkswirtschaft ist aber unmoeglich." Prewar surveys had been not total but covered only limited sectors and the RFM doubted the feasibility of its ideal standard. "Selbst wenn man die ungeheure Arbeit einer volkswirtschaftlichen Statistik der gesamten Produktion vornehmen wuerde, so wuerde doch bis zur Aufarbeitung des Materials das Ergebnis veraltet sein."³⁷

The response by the SRA to Bonn's index number proposal was more technical than that of the RFM. The SRA was the first agency to raise the question of how to weight the components of the index. How could the consumption of an imported luxury like tea, be weighed up in a single index with the production of steel? The SRA insisted that every component of the index and sub-indices must surely be weighted. But it did not specify how. To have answered that question one would have required something akin to the total statistics of production that the RFM had declared impossible. Meanwhile, the

³⁶ BAB, R 3101/14887, M.J. Bonn to Herr Dr Heidenreich RWM Berlin 24.8.1920.

³⁷ BAB, R 3101/14887, RFM Anlage 1 Gutachten 26.8.1920.

conundrum of the index drove the SRA to another innovation. How would the index proposed by Bonn respond to a future upswing in the German economy? To answer this question the SRA engaged in what may have been its first act of business-cycle modelling. To test the likely properties of the Bonn index the SRA reconstructed the movements of his proposed basket of statistics over the prewar period from 1903-1912, charting the overall index and its subcomponents. The SRA had not produced business-cycle analysis up to that point. There was, therefore, no clear benchmark with which to contrast the behaviour of the index. But the statisticians took it as common knowledge that there had been a severe setback to the German economy in 1907/8, something they referred to as a “Wirtschaftskrisis”. Disconcertingly, Bonn’s index did not point downwards but instead showed a strong upward movement into 1908. This was on account of a dramatic leap in deposits in Germany’s rapidly expanding savings bank system between 1907 and 1908. Only if savings were removed did the index track the common sense of the period to any extent at all, falling from 120.6 to 118.6. The SRA cautioned that an index composed of such diverse series could easily become a merely “rechnerische Groesse ohne Wirklichkeitswert” an objection commonly made to the index number based business-cycle research of the period.³⁸ The SRA’s arguments were considered so pertinent by the RWM that they were passed on to Ministerial Director Simson under the title “Sofort! (underlined) Geheim!” and to amplify the message the SRA in early October produced what may have been its first graphical business-cycle analysis.³⁹

There were those on the German side who liked the index number topic in 1920-1921 because it was technical and gave them the chance to stall discussions in the hope that a new American administration would reverse Woodrow Wilson’s retreat from European affairs.⁴⁰ Others feared, that by relying too much on an adjustable index-linked component and by failing to offer the British and the French an adequate initial sum Berlin was playing with fire. There were powerful forces in France calling not for

³⁸ BAB, R 3101/14888, Praes SRA to RWM 20.9.1920.

³⁹ BAB, R 3101/14888, RWM 2.10.1920 to Auswaertiges Amt and BAB, R 3101/14888, Praes SRA to RWM 2.10.1920.

⁴⁰ Von Stauss’s position in BAB, R 3101/14891, II D Nr 133 24.1.1921 Vermerk, p. 4.

financial gain but for the destruction of Germany. If Germany proved itself either unable or unwilling to pay up, they would easily gain the upper hand.⁴¹

Over the winter of 1920-1921 as the deadline for the final announcement of the reparations bill ticked closer, the anxiety in Germany about the difficulty in establishing their capacity to pay reached a new intensity. In a typically bold gesture Walther Rathenau proposed to cut through the Gordian knot. The superficiality of the reparations debate since the Spa conference, which he had attended as one of the Reich's leading spokesmen on the economy, frustrated him. "Bisher habe man sich nur ueber Papierfragen unterhalten (wie man sein Budget entlaste, neue Steuern einfuehren koenne usw), aber nicht ueber die Produktionsfragen. ... Bei der Eroerterung des Indexproblems solle man die Indexzahlen auf die Produktionsverhaeltnisse des Landes abstellen. Das wuerde die Garantie fuer eine sachliche Diskussion bieten."⁴² "Das RWM solle doch wenigstens versuchen, authoritative Schaetzungen fuer diese entscheidenden Ziffern zu erlangen. Er erachte dies als eines der vornehmsten Aufgaben des RWM. Wir wuessten doch gar nicht ueber unsere Erzeugung und unseren Verbrauch, jetzt und im Frieden. Solange wir aber hierueber nicht einigermaßen zuverlässige Zahlen anzugeben in der Lage sind, werden die anderen zur Begründung ihrer Reparationsforderungen, immer erneut darauf hinweisen, dass wir noch keine Fenstersteuer haetten, dass Tabak und Bier hoeher besteuert werden koennten, usw. Auf der "Papierseite" erweist sich diese ja auch als richtig. Auf der Papierseite koennen wir ins ungemessene Zahlen. Aber auf der Realseite hat unsere Zahlungsfähigkeit nachweisliche Grenzen. Haetten wir eine Produktionsbilanz, dann waere die ganze Reparationsfrage viel einfacher."⁴³ It was precisely in response to this challenge by Rathenau that the RWM mobilized its industrial organizations to produce the one-off snap estimate of production in February 1921.

But before these technical initiatives could go very far in the spring of 1921, the politics of reparations took a dangerous turn that swept aside any further argument. The critics of Germany's bargaining tactics were proved correct. Both London and Paris were under serious financial pressure. The Harding administration showed no more interest in involving itself in reparations politics than had its predecessor. When London and Paris

⁴¹ BAB, R 3101/14880, Bl. 50-56.

⁴² BAB, R 3101/14891, II D Nr. 133 Berlin 24.1.1921 Vermerk, 2-3.

⁴³ BAB, R 3101/14891, II D Nr 133 Berlin 24.1.1921 Vermerk, 11-12.

judged the initial German offer to be derisory, they retaliated with sanctions. Then in May 1921 they imposed the London ultimatum. The final total was set at 132 billion Goldmark. Annual payments were set at 2 billion plus an adjustable indexed element. But rather than engaging in technical niceties the Allies simply claimed 26 percent of Germany's export earnings. Over the following 18 months the result was to put the Reich's Statistical Office and its creaky system of trade statistics at the center of international attention.

Statistics and Reparations Diplomacy 1920-1923

The inter-ministerial working program around which the Weimar republic organized its response to the London ultimatum assigned the RWM the lead on two separate tasks. The first was domestic resource mobilization out of which emerged the famous Hirsch program. The other issue assigned to the RWM was the "Bereinigung der Aussenhandelsstatistik".⁴⁴ Under the London ultimatum the allies assumed that the indexed element would yield at least 1 billion Goldmarks, but how exports were counted might potentially raise the bill by hundreds of millions of Reichsmarks. In 1921 it fell to State Secretary Hirsch himself to lecture the Reparations Commission on the technical details distinguishing *Gesamteigenhandel* from *Spezialhandel* and the significance of imported raw materials in the gross value of German export sales. It was a scene hard to imagine before the war. But given the numbers involved one could see why it was worth Hirsch's while. The total value of all goods leaving Germany in 1920 declared as *Gesamteigenhandel* was 71 billion paper Marks. The figure that the SRA believed appropriate as the basis for an export index was 52.7 billion marks, a difference of 26 percent.⁴⁵ It was in such technical arguments that the truth of Rathenau's famous declaration became clear: *Wirtschaft* had indeed become Germany's *Schicksal*.

But in statistical terms Germany no longer determined its own fate. The effect of the London ultimatum was to place the SRA and its trade statistical department in particular under allied supervision. The Italian economist, Constantino Bresciani-Turroni was appointed as overseer and given the right to make enquiries with any official of the

⁴⁴ BAB, R 3101/14827, Bl. 125-6.

⁴⁵ BAB, R 3101/14879, Bl. 60-64.

Statistical Office.⁴⁶ The Germans sought to counter this intrusion by reorganizing the Statistical Office. And they went further than that. Given its oversight by foreigners, the Statistical Office was to be quarantined. Ministerial enquiries would no longer be directed to the SRA: “Es wuerde dadurch ... vermieden werden, dass die Entente vorzeitig darauf aufmerksam wuerde, fuer welche statistischen Zusammenstellungen .. Deutschland ein Interesse hat. ... Auch wurde darauf hingewiesen, dass kuenftighin bei allen Schreiben an das Statistische Reichsamt eine gewisse Vorsicht obzuwalten hat.” All communication was to run through the RWM, which would handle relations with the SRA and its foreign overseers.⁴⁷

The premise of fulfilment policy between 1921 and 1922 was that by working with the Entente in an effort to make Versailles work, Germany would demonstrate the impossibility of the peace, gain good will and persuade the Entente to accept revision. Over the summer of 1921 the Reich scrambled to make the first 1 billion Goldmark installment. The result was to place insupportable stress on the balance of payments. Already after only one payment it was clear that Germany needed urgently to get the allied demand revised. But how was a revision to be obtained?

One option was to seek to replace the export index. The London treaty offered the Reich the chance to propose an alternative. But by September 1921 the German index-commission found itself in a tight spot. The Entente clearly expected the index component of the London agreement to deliver at least 1 billion goldmarks. They would accept nothing less. Germany was however adamant that this was impossible. If it were to find a substitute for the export index that was acceptable to the Entente that could only mean that it was ruinous for Germany. Given the protests it had launched against the export index, it could not however avoid proposing some kind of new scheme. If it failed to do so the Entente would blame the Germans for failing to avail themselves of a possibility to improve their situation. The only “solution” was for the Germans to expend considerable energy on devising a self-compensating index that was certain to be rejected by the Allies.⁴⁸

⁴⁶ He would summarize his experiences in the classic, C. Bresciani-Turroni, *The Economics of Inflation. A study of currency depreciation in post-war Germany* (London, George Allen 1937).

⁴⁷ BAB, R 3101/14882, Bl. 35-45. RWM 1.9.1921.

⁴⁸ BAB, R 3101/14879, Bl. 87-90.

Only a full frontal attempt at revision would really work. Whereas Britain was broadly sympathetic to German moratorium requests, France, which was under huge financial pressure from the United States, was adamant that Germany could pay. German and French experts jostled over estimates of tax rates and purchasing power parities. But what was striking was how decidedly the debate turned on macroeconomic variables. As Wagemann put it in the name of RWM, Sektion I/7: “Es erscheint daher ... die Gegenueberstellung des Volkseinkommens und der gesamten Steuerbelastung der einzig gangbare Weg zu sein – sei es in absoluten Zahlen, sei es, was vielleicht vorzuziehen ist, in ihrer prozentualen Steigerung.”⁴⁹ And this attitude was echoed by the German Kriegslastenkommission which rejected any comparison of per capita tax burdens unless it was linked to comparable estimates of national income.⁵⁰ And this was the approach adopted by the Germans in their memo for the Cannes conference January 6-13 1922 in which they refuted French suggestions about the inadequate level of taxation in Germany on the basis of national income estimates authorized by the League of Nations. In general the German experts estimated that the tax take as a share of national income was between 30 and 40 percent in Germany as compared to 15 percent in France.⁵¹

The most contentious issue was the question of the trade balance.⁵² As the Germans noted, by early 1922 ever wider circles of foreign opinion were convinced that the German trade statistics were simply forged so as to understate exports.⁵³ There seemed to be inexplicable discrepancies between the values reported by German export statistics and those recorded in the import statistics of Germany’s trade partners. Furthermore as the SRA admitted, up to the spring of 1921 the figures reported for the value of imports were not based on declarations but retrospectively estimated by a committee of interested parties. The balance between imports and exports depended critically on which prices one used. As Wagemann’s Sektion I/7 explained at the end of 1921, measured in paper marks Germany ran a trade deficit of 28.82 bn marks that

⁴⁹ BAB, R 3101/14828, Bl. 336.

⁵⁰ BAB, R 3101/14830, Bl. 185-189.

⁵¹ BAB, R 3101/14837, Bl. 25.

⁵² On the economics and politics of the trade balance the indispensable reference remains Holtfrerich, *Die deutsche Inflation*, 202-217 and 277-297 for a recent reappraisal see A. Tooze, “**Trouble with Numbers: Statistics, Politics, and History in the Construction of Weimar's Trade Balance, 1918-1924**”, *American Historical Review* 113 (2008), 678-700.

⁵³ BAB, R 3101/14830, Bl. 204 Berlin 27.12.1921 Kabinettsitzung 26.12.1921.

diminished towards the end of 1920. Converted into Goldmarks the figures widely accepted by the German side were 5 billion Goldmarks for exports and 7 billion for imports. This however assumed a huge shift in relative prices, with import values having been inflated far more than exports. If one applied prewar prices then the result was inverted. At prewar prices, Germany actually ran a trade surplus in 1920. The question was whether this was a genuine shift in the terms of trade or an effect of the pessimism of Germany's experts and whether it was compounded by substantial underreporting in the original export returns.⁵⁴ As the statisticians admitted, "Immerhin wird nicht von der Hand zu weisen sein, dass unter den heutigen Verhaeltnissen verschiedene Gruende vorliegen, die einen Anreiz dafuer bilden, ... bei der Ausfuhr zu niedrige Werte anzugeben."⁵⁵ Many German goods were being dumped on markets with devalued currencies and 40 percent of German exports faced punitive tariffs forcing underpricing.⁵⁶ By 1921, however, as inflation resumed in earnest, German traders rapidly adjusted. As the SRA was forced to admit over the winter of 1921-1922 the trade balance showed a considerable surplus, as imports, which were now being reported in nominal marks by the importers themselves, lagged behind export valuations.⁵⁷ In April 1922 a major meeting attended by leading personnel from both the SRA, the RWM and the Reichsbank, including Vice-President Glasenapp met to discuss the need for a new system for valuing foreign trade. As Glasenapp insisted the paper Mark figures were dangerous not only because they were generating trade surpluses, but because they constantly inflated the impression of German trade.⁵⁸ He wanted a valuation based on goldmark. Others suggested that pound sterling should be used. Others preferred dollars. President Delbrueck of the SRA concluded that whereas there was unison in the criticism of the existing system there was no agreement on the direction of reform.⁵⁹

Meanwhile given its evident inability to pay and the wheeler-dealing of Lloyd George, Germany as a result of the Cannes conference did obtain a moratorium on its

⁵⁴ BAB, R 3101/14828, Bl. 152-155.

⁵⁵ BAB, R 3101/14849, Bl. 359-366.

⁵⁶ BAB, R 3101/14830, Bl. 350.

⁵⁷ BAB, R 3101/14842, Maerz 1922 SRA, Die deutsche Handelsbilanz.

⁵⁸ Glasenapp's view of the German trade balance at this point is summarized in Glasenapp "Die deutsche Zahlungsbilanz" *Manchester Guardian Commercial* 20.4.1922. A later summary can also be found in von Glasenapp "Germany's Trade Balance With Other Countries" *Advocate of Peace through Justice*, Vol. 85, No. 8 (AUGUST, 1923), pp. 289-291.

⁵⁹ BAB, R 3101/14882, Bl. 357 ff.

payments under the London schedule in early 1922. But there was a price to pay. In exchange it had to abolish the government's control of the Reichsbank and make it independent. And it had to accept increased levels of allied supervision and oversight of its fiscal position and as far as statistics were concerned this extended deep into the operations of the system itself. In mid January Bresciani's deputy Hammelryck began undertaking inspections of Germany's trade statistical reporting organization. This was humiliating. The Germans did not like the idea of being reduced to the status of a developing state whose public administration could not be trusted. It was arbitrary. To the dismay of the Germans Hammelryck chose the most important and complex first, Hamburg. As the report of the German accompanying him made clear Hammelryck lacked enough German or commercial expertise to make head or tail of what he was shown.⁶⁰ Furthermore, it was worrying because it threatened the trust on the basis of which statistics had to be collected. As the statisticians pointed out, they had traditionally refused to provide even the tax authorities with access to the trade returns. Now they were being asked to expose their entire correspondence to external oversight. To comply with this would result in nothing less than the "Zusammenbruch der amtlichen Wirtschaftsstatistik bedeuten. Bei den meisten Statistiken beruhte die Zuverlaessigkeit des Material darauf, dass die Befragten die Uerberzeugung haben, dass Geschaeftsgeheimnisse gewahrt werden ... bei einer Durchbrechung dieses Grundsatzes wuerden die Unterlagen unrichtig eingereicht werden."⁶¹ The reputation of German statistics would be in ruins if the patriotic press got hold of the story that what was at stake in the "Auslieferung des deutschen Aussenhandels an die Entente."⁶²

Throughout the summer and into the fall of 1922 the Germans and the Reparations Commission continued to struggle over the valuations of imports and exports and the nitty gritty of control. This extended from the registrations of bulk exports of mixed bags of unclassified goods to the legibility of individual statistical declarations. So intense was the scrutiny that the SRA was forced to remind Bresciani that since in the German reporting chain particular officials were over and over again involved in reporting and recording the same deliveries they acquired a remarkable ability to decipher

⁶⁰ BAB, R 3101/14882, Bl. 145-154.

⁶¹ BAB, R 3101/14831, Bl 9-12.

⁶² BAB, R 3101/14882, Bl. 519.

each others handwriting. When these hastily filled out forms then passed through many hands and were retrieved for retrospective fact-checking it could hardly be regarded as suspicious that they were hard to decipher.⁶³

By the autumn of 1922 - after Silesia and Rapallo, after the assassination of Erzberger and Rathenau and after the onset of hyperinflation in July 1922 - it was no longer illegible forms that were in contention, but the very logic of the fulfilment policy. Since 1921 Britain had embarrassed itself in its search for a general solution to the problem of postwar order, Mussolini had seized power in Italy and France's patience had run out. With America standing aside, Europe was drifting towards confrontation. The only alternative was for the Weimar Republic to find the internal political strength to impose a fiscal settlement sufficiently severe to enable it to service reparations. As all realized this would involve a huge cut to domestic demand which in the best case scenario would turn the trade balance, by cutting imports and boosting exports, thus generating the surplus necessary to pay reparations. Nationalist opinion was convinced that the problem of adjustment was insuperable. Julius Hirsch led an increasingly isolated faction at the RWM that continued to believe in fulfilment. The stakes could hardly have been higher. Fundamental questions of Weltanschauung were at stake. But it was not merely a question of ideology. Ultimately the issue depended on the scale of the required adjustment and this led back to the familiar statistical question: how large was the imbalance on the trade account?

On this question by the fall of 1922 there was profound disagreement. In the Reparations commission of the Reichswirtschaftsrat on 2 October 1922 Hilferding remarked: "Es wird von einem Defizit unsere Zahlungsbilanz gesprochen. Ob ein wirkliches Defizit besteht, ist nicht einmal feststellbar."⁶⁴ Others were less willing than Hilferding to accept the uncertainty of the situation. On 13 October the SRA hosted another meeting to discuss the valuation of the trade statistics. Otto von Glasenapp of the Reichsbank who had argued already in the spring of 1922 for valuation in gold had lost his patience. It was irresponsible to go on publishing trade statistics based on papermark valuation in which due to the discrepant factoring practices of importers and exporters the

⁶³ BAB, R 3101/14833, Bl. 41-43.

⁶⁴ BAB, R 3101/14823, Bl. 586ff.

values were completely incomparable. "Taten seien noetig" Glasenapp insisted. "vor der grossen Reparationsverhandlung Ende ds Js müsse die Statistik in Ordnung gebracht sein unter rücksichtloser Beseitigung aller Schwierigkeiten. Ein grundsätzlicher Kabinettsbeschluss sei notfalls in den nächsten Tagen herbeizuführen und die Reichsbank werde den Antrag stellen, wenn das kein anderes Ressort es tue. Die Lage sei furchtbar ernst; es drohen nicht nur österreichische sondern russische Verhältnisse....".⁶⁵ Wagemann urged caution since revaluing the data in goldmarks "bildet eine Gefahr, da die Ausfuhr dann höher erscheint." But Ritter of the Auswärtiges Amt added his voice. "unendlicher Schaden ist durch die falsche Statistik bereits angerichtet. Es muss sofort etwas geschehen." To which Delbrueck responded that "übereilte Reform ist bedenklich, da doppelter Misserfolg eintritt, wenn der gewünschte Erfolg dann nicht sofort erkennbar wird." Delbrueck reported that "Das Reichsamt hat bereits Goldzahlen geschätzt; es frage sich nur, ob deren Veröffentlichung zweckmässig" sei. After reading out the figures Glasenapp response was "Dass diese furchtbaren Zahlen noch nicht der Reichsbank und den anderen interessierten Behörden bekanntgegeben worden sind, ist ganz unglaublich. Welch wertvolles Propagandamittel ist da unbenutzt geblieben. Es wäre unverantwortlich, wenn der bisherige Statistikunsinn nicht unverzüglich beseitigt würde ... kein Aufschub kann geduldet werden. Wenn nicht heute, dann müsste spätestens anfangs kommender Woche ein Ergebnis erzielt werden. So geht es nicht weiter. In den vergangenen 6 Monaten ist seitens des RWM und SRA nichts geschehen; ähnliche Verschleppung ist auch ferner zu befürchten, wenn nicht sofort Massnahmen beschlossen werden. Die volle Wahrheit wird sich bei der Statistik nie feststellen lassen, aber man muss ihr möglichst nahe kommen. Uns schützt vor dem Ertrinken nur die Ermaessigung der Reparationslasten; sie ist nur durch eine Verbesserung der Aussenhandelsstatistik zu erreichen. ... es geht nicht, sich lediglich in Erwaegungen zu ergehen und die ganze deutsche Volkswirtschaft zu Grunde gehen zu lassen nur weil die Statistiker nicht zu Rande kommen. Wenn die Reichsbank so grosse neue Aufgaben, wie

⁶⁵ BAB, R 3101/14883, Bl. 246-249.

jetzt durch die Devisenordnung, ploetzlich uebernommen hat, muss auch das RWM in der Lage sein, etwas schnellere Massnahmen zu ergreifen."⁶⁶

A day later Glasenapp and his colleagues alerted the embattled Chancellor to the "... truly shocking fact that the German import statistics are completely wrong and virtually useless."⁶⁷ And their intervention was not without effect. On 24 October 1922 at this pivotal moment in Germany's history the embattled Chancellor Joseph Wirth took time to write the following letter to his Minister of Economic Affairs, the Social Democrat Robert Schmidt:

"My esteemed colleague, I assume that you are informed about the discussions in recent days at the War Burdens Commission in Berlin about the methods of trade statistics. ... If the statistics of our foreign trade are as false and our balance of trade is as much in deficit as one must assume on the basis of these discussions, then our situation with regard to a number of domestic and foreign political questions presents itself in a completely different light. In light of such a severe deficit in the balance of trade, the question of the stabilization of the Mark must be judged on a completely different basis than on the assumption of the current figures."⁶⁸ In other words given the scale of the deficit stabilization was not an option.

The Chancellor went on, "the balance of payments is of greatest importance for our entire economic policy and by failing to inform the domestic and foreign public of the disastrous state of the German trade balance we have deprived ourselves of one of the most effective means of propaganda in the struggle for a reduction of the reparations burden and against the treaty of Versailles. [...] I must admit, that the results of these discussion have surprised and shocked me in the greatest degree".

A week after Schmidt received his humiliating missive from Wirth, the Reichsbank followed it up with another memorandum stressing that accurate figures for German foreign trade, that is figures confirming the view that Germany was running a large deficit, were "in truth [...] a question of life and death for the German people and the German economy"⁶⁹

⁶⁶ BAB, R 3101/14883, Bl. 246-249.

⁶⁷ BAB, R 43I/1173, Bl. 352 Reichsbank-Direktorium to Reichskanzlei and RWM 14.10.1922.

⁶⁸ For this and the following see BAB, R 43I/1173, Bl. 354 Reichskanzlei to RWM 24.10.1922.

⁶⁹ BAB, R 43I/1173, Bl. 363 Reichsbank to Reichskanzlei and RWM 30.10.1922, p. 4.

By late October 1922, the advocates of stabilization led by Hirsch and the RWM had lost the battle. In November 1922 the Wirth government collapsed, to be replaced by the Cuno administration, which abandoned any effort at domestic stabilization. Julius Hirsch resigned from the RWM amidst a poisonous storm of anti-semitic libel. The head of the Department for Trade Statistics in the SRA was replaced and the estimates of the trade balance for 1922 were completely revised.⁷⁰ As critics had argued for almost a year, the German trade declarations were skewed by asynchronicity in the payment systems for foreign trade. Under inflationary conditions importers sought to pay as soon as possible and in local currency, whereas exporters took payment as late as possible in foreign currency.⁷¹ As a result imports were understated relative to exports. To compensate for this complex bias, from November 1922 rather than simply relying on returns at the national boundaries, import returns were 'adjusted' to bring them into line with current prices and exchange rates. This allowed the Office to finally announce the crowd-pleasing news that in the period between January and September 1922, Germany had run a cumulative deficit of 1.5 billion Goldmarks. It was on this basis that Germany braced for conflict with France.

Statistics and hyperinflation

In the weeks leading up to Christmas the bureaucrats of the RWM with the assistance of the SRA began to calculate the likely impact on the German economy of a French occupation of the Ruhr. The consequences would clearly be drastic, leaving much of Germany in total dependence on the French.⁷² The analysis was based entirely on the distribution of coal. 80 percent of German production came from the Ruhr. Since the French would hardly be able to bottle up the gigantic flows of material at the pitheads in the Ruhr what worried the German analysts most was not a throttling of supply but the possibility that the French and most likely the Poles in Silesia as well would demand much higher world market prices than were currently prevailing in Germany. And they would demand to be paid in hard currency. The result would be the collapse of the

⁷⁰ BAB, R 43I/1173, Bl. 334 RWM to Reichskanzlei 4.11.1922 and the Reichsbank's copy in BAB, R 2501/6594, Bl. 168-178 and Bl. 397 RWM to Reichskanzlei 10.11.1922.

⁷¹ See the extensive discussion in BAB, R 2501/6594, Bl. 168-178.

⁷² BAB, R 3101/14833, Bl. 415-420.

German economy. It would be the first of many such analyses. On 8 January 1923 the reparations commission announced to the German government that on the basis of the hotly disputed export returns for the end of 1921 it owed a reparations payment of 279.987,489.61.⁷³ Within days, with Germany in default on all payments, the French army occupied the Ruhr. The final slide into catastrophe had begun.

The measures of this catastrophe was hyperinflation. But how was hyperinflation to be measured? It was an irregular, spasmodic and terrifyingly uncertain process. Inflation surged in the last half of 1922, then briefly stabilized thanks to Reichsbank intervention before surging again from the second half of April 1923.⁷⁴ Immediate information was now the overriding concern. Some private agencies and local statistical offices had already begun to publish fortnightly or even weekly indices.⁷⁵ There were calls for the Reich to follow suit, but the Labour Ministry was terrified of accelerating the spiral of wages and prices.⁷⁶ In both March and May of 1923, lulled by the illusion of a temporary stabilization in prices, the Reich's cabinet considered but rejected the idea of a weekly Reichsindex.⁷⁷ Right up to the final astronomic burst of inflation in the summer of 1923 the SRA lagged far behind. Only in mid-June 1923 did the Labour Ministry finally accept the need for automatic wage indexation.⁷⁸ With no time for careful preparation, the statisticians were ordered to produce a weekly index.⁷⁹ The result was an embarrassing fiasco.⁸⁰ In its desperation to improvise a weekly index, the SRA cobbled together two separate indices, which when cumulated over a number of weeks led to contradictory results. In the third week of August 1923 the Statistical Office first announced that inflation as running at 50 percent per week and then corrected that figure to 75 percent. The press comment was scandalous.⁸¹

⁷³ BAB, R 3101/14828, Bl. 581a-583.

⁷⁴ C.S. Maier, *Recasting Bourgeois Europe* (Princeton, Princeton University Press 1975), 367 and Feldman, *The Great Disorder*, 654.

⁷⁵ *WuS* 1 (1921), p. 364.

⁷⁶ BAB, R 39.01/10661, Bl. 28, 40, 44, 48.

⁷⁷ BAB, R 39.01/10661, Bl. 112, 116, 117, 219.

⁷⁸ J. Bähr, *Staatliche Schlichtung in der Weimarer Republik. Tarifpolitik, Korporatismus und industrieller Konflikt zwischen Inflation und Deflation 1919-1932* (Berlin, 1989), pp. 66-67.

⁷⁹ BAB, R 39.01/10661, Bl. 277-283.

⁸⁰ BAB, R 39.01/10662, Bl. 17, 110.

⁸¹ BAB, R 39.01/10662, Bl. 22, 23, 27, 103, 132, 188.

Under the impact of the hyperinflation the statistical system was falling apart. Few if any meaningful statistics about international trade could be generated in Germany in 1923 given the loss of control over a large part of the country's western territories. But the argument about the data went on nevertheless. In early 1923 British, French and Italian experts on the Reparations Commission found a new series of problems this time not in the import, but the export data. Comparisons of the papermark values declared by German exporters for their consignments at the customs post with the domestic prices charged for similar categories of goods indicated that German exporters were declaring artificially low prices.⁸² The SRA noted large discrepancies between the papermark values declared for export consignments, as opposed to those declared in inflation-proof goldmarks. The papermark prices tended to be the official minimums rather than actual market values. The consequences were dramatic. After the scandal of 1922 the Statistical Office had rejigged its procedures to arrive at an estimated deficit 2.23 billion goldmarks for the year. Allowing for the undervalued exports, the Reparations Commission estimated a deficit of little more than 250 million. The SRA re-estimated the balance at a surplus of 150 m Goldmarks.

This was not the news to announce to the German public in the summer of 1923. Instead, the RWM summoned a series of confidential meetings. The ensuing debate was full of bitter irony. The Reichsbank was forced to admit that the new estimates compiled after its dramatic intervention in the autumn of 1922 misstated the position. But the committee agreed to avoid another round of humiliating public revisions.⁸³ It was the liberal economist Arthur Feiler and former Minister of Economic Affairs Robert Schmidt, amongst the last advocates of stabilization in the autumn of 1922, who spelled out the devastating political implications of the new data: "The false statistics produced hitherto (since November 1922) were the basis for inactivity in fiscal and monetary policy and the basis for current economic policy. Doing away with this foundation would put those in the right who had all along demanded a different policy" i.e. a policy of stabilization.⁸⁴

⁸² BAB, R 2501/6594, Horten „Der Wert der deutschen Ausfuhr“ *Plutus* 19.6.1923.

⁸³ BAB, R 2501/6430, Reichsbank memo zu Nr. 21811 14.7.1923.

⁸⁴ GSTA I. Rep. 120 C VIII 2a Nr. 25 Bd. 3 Bl. 648 Berlin 25.7.1923 Vermerk.

Nevertheless to spare the blushes of the Reichsbank, the SRA's revised figures were held back.⁸⁵

Meanwhile, the SRA's reports on the damage done by the Ruhr occupation made sobering reading. By November 1923 when the occupation had past its brutal peak and the German government had surrendered, the SRA listed 132 people killed, 11 death penalties, 5 life sentences and 1454 other incarceration as well as the expulsion from their homes of 187,617 people and the evacuation from the Ruhr area of a further 172,006. Despite the German resistance 2.294 m tons of coal and coke had been exported along with other goods valued at a total of 3.5-4 billion goldmarks. The public purse had suffered a fiscal loss running to at least 2 billion goldmarks.⁸⁶ But the SRA insisted on clarity with regard to these losses. Numerous press reports had put Germany's total losses at as much as 5 or more billion goldmarks. As a simple check on these exaggerated number the SRA proposed a simple macroeconomic check. If one estimated Germany's diminished national income in 1923 at 28-29 billion on the basis of the prewar Helfferich figure, then the Ruhr could be assumed to contribute a quarter of national income, which came to c. 7 billion goldmarks. If half the population had been involved in the passive resistance then this implied a loss not of 5 billion, but of 3.5 billion goldmarks.⁸⁷

II. Statistics and Weimar's Stabilization

Statistics and the Dawes Plan

As the new round of reparations negotiations began at the end of December 1923 in anticipation of the arrival of the American mediators led by Charles Dawes, the mood was one of determined *Sachlichkeit*. In the businesslike spirit insisted on by the Americans, the consensus on the German side was that "kein Propaganda-, sondern objektives Zahlen- und Tatsachenmaterial zusammengestellt werden muesse." What were needed were factual comparisons of the period before and after 1913 with a careful discussion of different methods. "unter anderem auch Verwendung der in Amerika und England beliebten Wirtschaftsbarometer." In Josiah Stamp the Germans knew they were

⁸⁵ As the Reichsbank noted with satisfaction BAB, R 2501/6430, Bl. 270 Aktenvermerk.

⁸⁶ BAB, R 3101/14750, Bl. 55-76 SRA report to the Reichskanzlei 22.11.1923.

⁸⁷ BAB, R 3101/14750, Bl. 74-76.

up against a formidable and straight-shooting statistical expert who had intimate knowledge of the familiar pre- and postwar sources on German national income.⁸⁸ The German team headed by Hans Schaeffer from the RWM and Friedrich Burgdoerfer from the SRA included Drs Adolph Loewe, Wilhelm Lautenbach, Gerhard Colm and Kurt A. Herrmann.⁸⁹

On 31 January 1924 Loewe was asked to report on the tax burden in Germany. His answer was an exemplary instance of the clarification that had taken place in thinking about issues of national economic burden. A comparison of the tax burden Loewe stated simply depended on the availability of comparable national income statistics. From these could be deduced the proportional burden of taxation and what was left to each individual after tax. It was extremely difficult to reliably estimate German national income in the immediate aftermath of the hyperinflation, but one could proceed backwards from tax revenue and tax rates. Loewe calculated an estimate of wage income on the basis of the tax returns that came to 21.6 bn RM. Allowing another 10 bn for other sources of income implied a national income of roughly 31.6 bn goldmarks. Allowing for the damage done to stocks and other assets by the inflation he estimated net national income at closer to 25 billion goldmarks. Total Reich revenue from taxes was estimated for 1924 at 5.143.7 billion goldmarks. Adding another 1.75 billion in local taxation he estimated that total tax revenue was 6.894 billion or 27.6 percent of national income.⁹⁰

As the discussion intensified in the course of March 1924 disagreement focused less on the immediate situation than on the likely prospects for the German economy. Stamp made clear that he regarded the estimates being proffered by the German government of a current national income of 25 billion rising to 31.6 billion by 1928 as too pessimistic. He thought that Germany would surely reach a level of 36 billion by 1928 whereas his colleagues on the Dawes Committee thought that 40-46 billion was more realistic.⁹¹ The RFM defended their estimates by spelling out their basis of calculation. Starting from an estimate of 25 billion for German national income in 1924 they argued that this would be increased by a recovery in the labour market and by “die

⁸⁸ BAB, R 3101/14907, Bl. 101-109.

⁸⁹ BAB, R 3101/14907, Bl. 62.

⁹⁰ BAB, R 3101/14907, Bl. 211-213a.

⁹¹ BAB, R 3101/14907, Bl. 489-494.

durch sonstige zunehmende Prosperitaet eintretende Vermehrung”, what we today might refer to as normal trend growth.⁹² As to the reduction in unemployment the RFM expected the figure to reduce from 3 million to 150,000 by 1928 which was comparable to prewar unemployment. Assuming that output per person was 1200 goldmarks, the effect would be to raise output by 1.2 billion in 1924 and 1925 and 720 million and 300 million goldmarks in 1926 and 1927 respectively. In addition the secretary of state at the RFM proposed that one should assume the annual average rate of growth calculated between 1896 and 1912 by Helfferich which was 3 percent. Stamp, however, challenged the assumption that the return to trend was adequately captured by the labour market effect factored in by the RFM. Allowing for a rapid return to full production, he thought that per annum growth of 4 billion goldmarks might be closer to the mark. Fischer of the RFM admitted that this couldn't be ruled out but that it depended on overall conditions for growth returning to the prewar norm.

Since March 1924 in an effort to bridge the gap between the German side and the reparations creditors Stamp had reintroduced the idea of an index to adjust payments according to the German recovery.⁹³ The version included in the final report of the Dawes Committee harked back to Bonn's first suggestion in 1920. It consisted of an average of six different components: imports and exports, the revenues of the Reich, Prussia, Bavaria and Saxony, the volume of traffic on the railway system, the consumption of sugar, tobacco, beer and spirits, the total population and the per capita consumption of coal.

By November 1924 expert Germans were beginning to worry that this index could become a liability. The SRA performed a series of model calculations of the index, which showed that it had increased by 60 percent between 1887 and 1913 and no less than 39 percent between 1904-1913 during that period of exceptional growth.⁹⁴ This was a large increase of course. The question was whether it was warranted, whether the index actually captured Germany's ability to pay. To judge this question the RWM opined that one needed a "Pruefstein". And in 1925 it commented, "als dieser Pruefstein darf das

⁹² BAB, R 3101/14907, Bl. 510-521.

⁹³ BAB, R 3101/14907, Bl. 411, 432-437.

⁹⁴ BAB, R 3101/15010, RWM II B5 Soltau Besserungsschein 29.4.1924. and BAB, R 3101/14907, Bl. 568-570.

Volkseinkommen genommen werden.” Though all of the components of the index no doubt moved with national income, there was no particular reason to think that they rose to the same extent as national income. Even if there had been a coincidence in the past, there was no certainty that this would extend into the future. A first rough estimate of national income from tax records between 1895 and 1913 resulted in the conclusion that over the period 1895 to 1913 the index had risen far faster than national income.⁹⁵

Work on Germany's official estimate of national income began in the summer of 1925. In the autumn, after a comprehensive review of methods used by economists abroad, the Statistical Office embarked on a major revision of the figures both for the prewar and postwar periods.⁹⁶ Under the overall leadership of Ministerialdirektor Hans Platzer, Dr Gerhard Colm headed the research team. Initially, the statisticians concentrated their efforts on revising Karl Helfferich's much cited estimate for the prewar period. Their suspicions focussed above all on his underestimate of tax evasion. The introduction of a compulsory pay-as-you-earn (PAYE) income tax by the Weimar Republic had revealed large swathes of uncounted income. Working from Prussian, Saxon and Bavarian tax records, Colm's staff arrived at a figure for prewar national income as high as 50 billion Mark, substantially greater than Helfferich's estimate. Work then progressed on the postwar accounts, new data being sporadically released to the public through the organs of the Statistical Office and the Institut fuer Konjunkturforschung (IfK) that was called into existence in 1925.⁹⁷ On the basis of PAYE income tax figures, the IfK put German national income in 1925 at between 50 and 55 billion RM. It thus came close to endorsing the trade union's relatively optimistic assessment.⁹⁸ The culmination of these efforts came in 1932 with the publication of a study, which traced the development of the German economy since 1890 in strictly macroeconomic terms.⁹⁹

As for the Dawes-Plan index the RWM decided to let sleeping dogs lie. It did not come into effect until 1929. By that time the Germans fervently hoped that the entire

⁹⁵ BAB, R 3101/15010, Bl. 92-107.

⁹⁶ BAB, R 401/628, Bl. 490 ff.

⁹⁷ *Wochenbericht des Instituts für Konjunkturforschung* 2 (1929), 23.12.1929 and *VzK* 4 (1930), pp. 44-49.

⁹⁸ *Vierteljahrshefte zur Konjunkturforschung (VzK)* 1 (1926) Heft 1 Mid May 1926, pp. 39-48.

⁹⁹ SRA, *Das deutsche Volkseinkommen vor und nach dem Kriege Einzelschriften zur Statistik des Deutschen Reichs*, Nr. 24, (Berlin, 1932).

basis for the plan would be revised. In the mean time it would certainly do them no good to reveal how concerned they were about its implications for future payments. That could only encourage the French and British.¹⁰⁰ Better to treat it as a technical issue of little consequence.¹⁰¹

Return to normality?

The stabilization of Germany in 1924 enabled the Statistical Office like other branches of German government to resume something like normal activity. Surveys like the cost of living index and the trade statistics which under conditions of hyperinflation were a lost cause, began to operate smoothly again. Stabilization brought severe cuts to staffing levels in the German bureaucracy. Employment at the SRA fell from 1300 in October 1923 to only 1000 staff members in June 1924. But from that low point employment rapidly surged to record levels. In July 1930 the SRA counted no less than 3000 Beamten and clerical staff.

The largest single statistical task undertaken in the 1920s was the Berufs- und Betriebszählung. First conceived immediately after the war to continue the series interrupted since 1907, it was finally carried out in 1925. The first results were ready by 1926. But it was not until the late 1920s that the final numbers trickled in from the underfunded Prussian office, allowing full national results to be reported. The census accounted for the largest part of the SRA's publications but the slow-moving results were also the least read. And it now made up a small part of the SRA's overall workload. This can be assessed precisely thanks to the statistics, which the SRA produced about its own activities. In 1929 the overall workflow through the SRA was as follows:

¹⁰⁰ BAB, R 3101/15010, Bl. 14-19.

¹⁰¹ BAB, R 3101/15010, Bl. 21-66.

Table 2: Staff allocation, data-processing load and published output of the Reich's Statistical office, December 1929

Department	Total Staff	Items of data processed, p.a. (millions)	Pages of stats published
Dep. I, General administration	479	16.8	330
Dep. II, Trade and transport	515	531.6	5050
Dep. III, Social statistics	189	57.2	2053
Dep. IV, Census and industrial production statistics	231	183.6	17275
Dep. V, Finance and administrative statistics of Reich	71	0.6	1427
Dep. VI, Tax statistics	847	690.0	2472
Dep. VII, Finance statistics	369	40.8	6300
Dep. VIII, General economic statistics	116	4.5	1343

Source:

BAB, R 31.02/4169 'Das SRA und seine Arbeiten. Stand Dezember 1929', p. 1.

How then should one narrate the extraordinary growth of the Weimar statistical apparatus after 1924? To a degree it was driven by the circumstances themselves. In an extended sense the growth of the Weimar statistical apparatus was an expression of Adolph Wagner's famous law of the rising public spending under conditions of modern economic development. Demands for more and better data had come thick and fast since 1919. Even the pressures of the Versailles peace negotiations could be seen in these terms as an expression of the modern problem of government expanded to the international sphere. As we have seen, the influence of the practical necessities of government reached even into the concepts themselves, generating the imperative to conceptualize and measure something like national income or the balance of payments in novel ways. If the period between 1919 and 1923 was one of repeated frustration, the expansion thereafter

was only to be expected given the huge pressure exercised by economic and social interest groups.

But what such an approach downplays is the agency of the officials and the statisticians themselves. Key figure at the RWM after the stabilization, notably Hans Schaeffer, followed in the technocratic footsteps of Julius Hirsch. And at the SRA itself a dramatic shift occurred. Whereas Ernst Delbrueck had been a pale figure as President of the SRA, Ernst Wagemann's arrival as President over winter of 1923-1924 signalled a new era in German statistical affairs. Wagemann had been serving as the RWM's fixer since 1919. And he would build a legendary reputation in the 1920s as an organizational entrepreneur. But Wagemann was not merely an organizational man. He articulated a distinctive vision of macroeconomics and macroeconomic policy. Not since the days of the 1850s and 1860s when the likes of Ernst Engel had animated official statistics in Saxony and Prussia, had Germany seen anything like the fusion of social scientific energy and quantitative data-gathering which unfolded after 1924.

Konjunkturforschung

Ernst Wagemann was born in Chile in 1884, the son of German emigrants. After studies at Göttingen and Berlin he completed his Ph.D. at Heidelberg University in 1907. He then began a teaching career at the new Institute of Colonial economics in Hamburg. It was the war, which launched his precipitous career in the civil service and also seems to have fuelled his interest in monetary economics. From 1916 Wagemann headed the statistical department of the War Food Office. In the postwar years his contacts were to serve him well. In 1919 Wagemann began lecturing at the prestigious University of Berlin. But, in the same year his former boss at the Food Office, Julius Hirsch, recruited him back into government service. Wagemann's task at the RWM was to oversee general economic analysis at the Ministry and to manage relations with the Statistical Office. He earned his promotion to President of the Statistical Office in March 1924 through his trouble shooting of the crises of the early 1920s.

Wagemann's mission was to join economics science to statistics. But in the 1920s, in the aftermath of the Methodenstreit and the crisis of historical economics, that begged the question. What was the economics that was pertinent to the problems of

modern government? Wagemann was not just a scientific entrepreneur, he was also part of a cohort of innovative German speaking economists who marked out a distinctive path towards macroeconomics in the 1920s. In 1923 alongside his official duties and his teaching at Berlin University he found time to complete an original study in monetary theory, his *Geldlehre*. This book is easily pigeon-holed as a work in the manner of the late historical school, discursive, narrative with little or no formalization. In his reading of money Wagemann was a nominalist. But unlike Georg Friedrich Knapp and his descendants he insisted that the state was not the issue. What founded money was the entire credit system of late capitalism. Furthermore, unlike most nominalists Wagemann was not content to elaborate on what money was. He wanted to know what determined its value at any moment in time. To answer this question Wagemann followed Schumpeter and others across the bridge from nominalism to the quantity theory. But whereas Irving Fisher was content to build his account of the American economy on the simple tautology that $M*V=P*T$, where M is the stock of money, V is its velocity of circulation, P is the average price level and T is the number of transaction, in his *Treatise* Wagemann set out to demonstrate how a new equation of exchange could be built on 'categories, which have a more comprehensive economic content'.¹⁰² The result was Wagemann's national economic account:¹⁰³

- (1) price * net output =
- (2) production costs including profit =
- (3) income =
- (4) consumption + saving =
- (5) (consumed and capitalized output) * price

The significance of these lines for our purposes is that they place the concept of national income that had become so central to debates about reparations and Germany's ability to pay, into a larger logical and analytical framework. Indeed, in algebraic terms they spell out the vision of the "circular flow" that would later come to be seen as the hallmark of the Keynesian revolution. As far as the German language world was concerned it was Schumpeter's *Theory of Economic Development* of 1912 that

¹⁰² Wagemann, *Allgemeine Geldlehre* (1923), p. 146.

¹⁰³ See Appendix 2 for a more precise discussion of these equations.

popularized the image.¹⁰⁴ Schumpeter took his inspiration from the second volume of Marx's *Das Kapital*, which in turn borrowed from French physiocrat Quesnay's tableaux économiques.¹⁰⁵ In the mid 1920s Emil Lederer could write that the concept of Kreislauf, or circular flow, was the common denominator of all contemporary theorizing.¹⁰⁶ It might perhaps have been more accurate to say that it formed a key concept for that clique of new-fangled macroeconomics to which Wagemann, Lederer, Colm, Hans Neisser, Loewe, Ferdinand Gruenig and others belonged. As Schumpeter would remark in his *History of Economic Analysis*, Wagemann never got to elaborate the promised second volume of his *Geldlehre*, but the statistical edifice, which he orchestrated as President of the SRA provided the substitute.¹⁰⁷ To further that work, in July 1925 Wagemann called into being the Institut fuer Konjunkturforschung, which he would head for the next 20 years.

The Institute was a free standing research center that drew on the data sources of the SRA, with Wagemann moving freely between them. The IfK enabled the network of economic enquiry to be extended by way of contacts with organized labour and German business. The IfK could engage in more speculative exercises in analysis and estimation than were permissible under umbrella of the SRA. The title of the Institute was itself programmatic. For anyone drawing inspiration from Joseph Alois Schumpeter or Arthur Spiethoff, the move from a macroeconomic balance to a dynamic account of business-cycles was an evident one. The general notion of business-cycle analysis had already attracted attention before 1914. But Konjunkturforschung had acquired a particular resonance in the early 1920s thanks to the work of the Harvard Committee, which had pioneered the use of synthetic statistical indicators to construct a simple predictive model. Though the Harvard Committee's work was received sceptically in Germany, still recovering from the Methodenstreit, Wagemann made no secret of his enthusiasm for the empiricism of American economics. But as was true of his adaptation of American monetarism, his aim was to fill business cycle analysis with "more substantive economic content". What would set the IfK's work aside was precisely the degree to which its work

¹⁰⁴ J. Schumpeter, *Theorie der wirtschaftlichen Entwicklung* (3rd ed. 1931 Munich), pp. 1-87.

¹⁰⁵ J. Schumpeter, *The Great Economists from Marx to Keynes* (London, 1952).

¹⁰⁶ E. Lederer, 'Der Zirkulationsprozess als zentrales Problem der ökonomischen Theorie', *Archiv für Sozialwissenschaft und Sozialpolitik* 56 (1926), pp. 1-25.

¹⁰⁷ J. Schumpeter, *History of Economic Analysis*, (London: Routledge, 1954), 1166.

and that of the SRA were embedded in an understanding that went beyond schematic quantitative and graphical connections to exploring the business-cycle as a macroeconomic phenomenon.

For the IfK and the SRA after 1924 the basic “Pruefstein” for the analysis of the business-cycle was national income. The swarm of short-term leading indicators that were constructed by the Institute in its efforts to diagnose the business-cycle were never more than proxies for the economic aggregate that was itself best proxied by national income. The emphasis on income as part of the circular flow in turn led the Institute in its analyses to place the emphasis as much on quantities as on prices and in particular to focus on the level of employment. The structure of employment could be derived from the periodic censuses. Further data could be gleaned from the rapidly expanding Reichsarbeitsministerium (RAM) , but to view the fluctuation of employment and the wage bill from the industrial side, the IfK developed a network of monthly reports from leading industrial employers that aspired to be nothing less than a “total business-cycle statistics”.

New data were one aspect of the expansion in the 1920s. No less significant was the transformation of existing data series under the influence of the new macroeconomic concept.¹⁰⁸ Informal estimates of the balance of payments had circulated within the RWM before 1923 and occasional estimates had been included in documents pertaining to the reparations debates. With the figures for imports and exports of goods finally having been straightened out in 1924, two years later the SRA published its first estimate of the balance of trade in services.¹⁰⁹ From having been a failed state in statistical terms, by the late 1920s Germany was inserted as a regular contributor to the League of Nations pioneering compilations of data on the international interconnection of balance of payments. The data themselves were hardly reassuring however, showing as they did the precariousness of Germany’s situation with a deficit on trade account and on reparations account being off-set by imports of capital.

With regard to price statistics one could trace a similar transformation in which basic surveys originally designed with a view to practicality and the immediate needs of

¹⁰⁸ ‘Introduction’ in *VzK 1 (1926) Ergänzungsheft 2* (Berlin, 1926).

¹⁰⁹ *VzK 1 (1926), Supplement 2*. Estimates of the balance of payments appeared annually in *Wirtschaft und Statistik*.

administration were given a new meaning and technical ambition by its incorporation into a macroeconomic schema. Germany's official statisticians had begun collecting the wholesale prices of 40 commodities in 1879. They were first aggregated into an index in 1921, which could be compared to the cost of living index.¹¹⁰ But once set within a circular flow model of the macroeconomy the wholesale index was transmogrified into something far more significant. The index now measured the prices of the national economy's working-capital. It measured the prices at which goods passed between producers, wholesalers and retailers. This in turn was crucial because fluctuations in investments in stocks were crucial to the dynamics of the business-cycle. In December 1926, the coverage of the index was therefore expanded to include the prices of no less than 170 raw materials and 230 finished and semi-finished products carefully weighted to reflect their economic significance.¹¹¹

Government taxation and expenditure was similarly reconceptualised as part of the cycle.¹¹² What mattered was not merely the accounting balance between the two, but their place within the wider flow of income and expenditure. To feed into discussions of countercyclical work-creation spending, the Statistical Office compiled figures for the purchasing of the Reich, the Länder and the Reichsbahn in the budget years 1926 and 1927.¹¹³ These tables enumerated the total value of orders placed by the main procurement agencies with each major branch of German industry. In future it would be possible to monitor the impact of particular public procurement policies on the turnover and employment of specific industries.¹¹⁴ From 1928 public procurement should be coordinated through a regular statistical survey.¹¹⁵ All major contracts placed by the Reich and the Länder were to be reported to a committee chaired by the Reich's Ministry

¹¹⁰ A. Jacobs, 'Die neue amtliche Großhandelsindexziffer', *ASA* 16 (1926/27), pp. 619-623, see also C-L. Holtfrerich, *Die deutsche Inflation 1914-1923. Ursachen und Folgen in internationaler Perspektive* (Berlin, de Gruyter 1980), 13-14.

¹¹¹ *WuS* 6 (1926), pp. 875-879 *VzK* 1 (1926), 4, pp. 139-145.

¹¹² Gerhard Colm, *Volkswirtschaftliche Theorie der Staatsausgaben. Ein Beitrag zur Finanztheorie* (Tuebingen: J.C.B. Mohr, 1927), which as Colm explained was the theoretical working out of the empirical data presented in *Staatsausgaben von Grossbritannien, Frankreich, Belgien und Italien in der Vor- und Nachkriegszeit*. SRA. *Einzelschriften zur Statistik des Deutschen Reiches* Nr. 2 (Berlin: Reimar Hobbing, 1927).

¹¹³ BAB, R 401/781, Bl. 66 RWM to Reichswirtschaftsrat 22.12.1927, see also H. Arons, 'Behördliche Konjunkturpolitik', *Die Arbeit* 5 (1928), pp. 527-529.

¹¹⁴ See the Reichsbank study BAB, R 25.01/6707, Bl. 202.

¹¹⁵ BAB, R 401/781, Bl. 363 'Gutachten des Arbeitsausschusses zur Beratung des Antrags Baltrusch'

of Economic Affairs. This would allow Schäffer and the RWM to exercise oversight, if not control, over the scale and timing of public procurement.¹¹⁶

Alongside estimates of income and expenditure the most important missing element in the macroeconomic dataset of Weimar Germany were comprehensive data on production. By 10 January 1925 as Germany regained its freedom to set its own trade tariffs, questions were asked in the Reichstag as to why it lacked these essential data. As a minimum the SRA resumed the surveys that had been in place before 1914.¹¹⁷ But this was clearly not enough to satisfy the ambition of the new economic research. It was crucial to complete the circular flow and to show how production generated income and was matched with expenditure. In 1927 Wagemann, therefore, instructed his staff to begin preparing a comprehensive census of industrial production along the lines already in place in Britain and the US. It was to take place in 1930.¹¹⁸ If fully elaborated, a census that counted production along with the inputs that entered into production would allow the business-cycle to be deciphered as a series of fluctuations transmitted from one sector to another.

The macroeconomic ambition of the data produced by the IfK and SRA in the 1920s is what has given them their longevity. These are recognizably modern economic statistics, easily adapted for the purposes of present day analysis. It is never easy in historical research to answer the question of reception and use. But the evidence we do have, suggests that the output of Ernst Wagemann's research establishment were very widely circulated at the time. They came to form the backbone of journalistic comment on the economy and a standard reference point in government planning. The SRA-IfK's data were technically impressive. They were extremely wide-ranging and they were produced promptly. Furthermore, they on the whole offered a sanguine assessment of the prospects of the Weimar economy that contrasted with the agonized navel-gazing that dominated the reportage produced by many contemporary interest groups and which dominated the proceedings of the so-called Enquete Ausschuss. Not that this relatively up-beat tone necessarily made the IfK-SRA more popular. Many influential voices

¹¹⁶ *WuS* 10 (1930), pp. 856-860.

¹¹⁷ E. von Roeder, 'Die industrielle Produktionsstatistik', in *Die Statistik in Deutschland nach ihrem heutigen Stand* (Berlin, 1940), pp. 1012-1024.

¹¹⁸ BAB, R 31.02/6181, 'Die industrielle Produktionsstatistik im In- und Ausland' (1927/8).

preferred to tell a disaster story about the Weimar Republic. Already in 1925 the SRA-IfK stirred up trouble when it arrived at a relatively high figure for German national income. In 1931 it offended again when it published what was destined to become a classic study of capital formation in interwar Germany.¹¹⁹ Industrial interests feared that the report by Keiser and Benning would provide ammunition for those who argued that German business had largely recovered from the ravages of war and hyperinflation.¹²⁰ Complaints were made to the Chancellor.¹²¹ To reassure the Reich's Association of German Industry Wagemann was forced to set up a Supervisory Committee to oversee the Institute's publications.¹²²

But though the IfK-SRA espoused a broadly sanguine outlook, it was committed to a business-cycle view of economic development. This implied a regular oscillation between periods of upswing, boom, crisis, downswing and depression. By the late 1920s after several years of relative prosperity, it would have been a problem for Wagemann's establishment if the German economy had not entered the crisis and downswing phases of the economic cycle. But when the crisis arrived in 1929, the scale of the downswing, combined with the new scope of the statistical apparatus, its influence with the public and the ambition of those who directed it, put the German statistical apparatus back at the center of the political storm.

III. The Statistical Establishment and the Crisis of the Weimar Republic

In the spring of 1929, the Institute for Business-Cycle Research diagnosed an imminent economic crisis and in the winter of 1929-1930 it announced that Germany was settling into a period of depression.¹²³ There was no certainty about the length of such a depression. However, on the assumption that the economy was settling at the bottom,

¹¹⁹ G. Keiser and B. Benning, *Kapitalbildung und Investitionen in der deutschen Volkswirtschaft 1924 bis 1928* (Berlin, 1931).

¹²⁰ For the use made of the data by the left see Tarnow's interventions in the Reichstag budget committee BAB, R 01.01/Film 31649/2590, Bl. 418 `25. Sitzung des Haushaltsausschusses 19.1.1931", p. 300.

¹²¹ BAB, R 07.01/Film 19065N/2110, Bl. 132, 183-207.

¹²² GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 408 and 519.

¹²³ The 'crisis' was announced in *VzK* 4 (1929), 1, 25.5.1929, A and *VzK* 4 (1929), 2, 24.8.1929, A. The depression phase was announced in November, see *VzK* 4 (1929), 3, 23.11.1929, A and more firmly in *VzK* 4 (1929), 4, 24.2.1930, A and *VzK* 5 (1930), 1, 23.5.1930, A.

there was no sense of an impending disaster.¹²⁴ For the future the statisticians expected to see counteracting forces gathering strength, which would lead the economy into recovery. Though many in the Brüning cabinet were more pessimistic, it was convenient to adopt this outlook as the basis for financial planning.¹²⁵

The first unpleasant surprise came in April 1930 when the Institute revised its outlook in a pessimistic direction. The Institute now expected only a slight recovery in the labour market during 1930, which in turn had unpleasant implications for the financial state of the unemployed fund.¹²⁶ To balance the budget as it had promised, the government was forced into painful cuts, which in turn led to the political crisis of the summer and the fateful dissolution of the Reichstag. By August 1930, having adopted austerity measures, the Finance Ministry, in the run up to the elections, was again putting a brave face on the financial situation.¹²⁷ The Institute, meanwhile had come to a more pessimistic view of the medium-term outlook.¹²⁸ As Wagemann had explained to a closed meeting of the Kuratorium on 18 June 1930, the Institute's economists now believed that Germany was undergoing a 'change in the period of the cycle'.¹²⁹ The postwar cycle periodicity had been unusually short. Now Germany appeared to be returning to the more normal 8 year cycle period, which would imply that it faced a phase of prolonged depression perhaps stretching over two years. The IfK announced the bad news to the readers of its *Vierteljahrshefte zur Konjunkturforschung* on 30 August just weeks ahead of the election.¹³⁰ And the implications were not lost on the public. On 6 September 1930 a report in the *Kölnische Zeitung*, a West German daily closely connected to heavy industry, highlighted the contrast between the economic forecasts of the Finance Ministry

¹²⁴ G. Plumpe, 'Wirtschaftspolitik in der Weltwirtschaftskrise. Realität und Alternativen' *GuG* 11 (1985), pp. 326-357.

¹²⁵ R. Meister, *Die große Depression*, p. 172.

¹²⁶ *Die Kabinette Brüning*, vol. 1, Doc. Nr. 21 Ministerial meeting 30.4.1930, p. 66.

¹²⁷ *Die Kabinette Brüning*, vol. 1, Doc. Nr. 114 Ministerial meeting 16.9.1930, p. 429.

¹²⁸ The first hint of this reassessment came in a letter from Wagemann to Brüning on 16 June 1930, see G. Schulz, *Von Brüning zu Hitler. Der Wandel des politischen Systems in Deutschland 1930-1933*, vol. III of *Zwischen Demokratie und Diktatur. Verfassungspolitik und Reichsreform in der Weimarer Republik* (Berlin, 1992), pp. 99-100.

¹²⁹ GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 291 'Sitzung des Kuratoriums des IfK 18.6.1930', p. 3 and the slightly different version of the meeting in GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 287 Prussian Min für Handel und Gewerbe Note 19.6.1930, p. 2.

¹³⁰ *VzK* 5 (1930), 2, 30.8.1930.

and the Institute.¹³¹ How given Wagemann's dual role as Director of the Institute and President of the Reich's Statistical Office were the public to take such forecasts? If the IfK was embarrassing the government, it was time for the lines to be drawn more clearly. But the business-cycle economists were not to be deterred. The last quarterly report for 1930 published in early December, was even gloomier and contradicted the projections made in the Financial Plan by Brüning's government following the election.¹³²

On 9 December 1930 the result was to cause an explosion in cabinet, when Chancellor Brüning, launched into a tirade against both the IfK and the SRA. 'Whenever the Reich's government issues statements, the Institute for Business-Cycle Research makes claims that contradict it. He [Brüning] was, therefore, considering whether to make a public statement against the Institute.'¹³³ The RWM was ordered to compile a report 'on the changing opinions of the Institute for Business-Cycle Research in relation to public statements of the Reich's government'.¹³⁴ And the Chancellor demanded to know how ex Reichsbank President Schacht, who was now opposing the government from the right-wing, had got wind of the Institute's new pessimistic forecast ahead of the government. Nor was Brüning's suspicion confined to the IfK. It also fell on the SRA. The central aim of Brüning's economic policy was to restore Germany's competitiveness by means of wage and price cuts.¹³⁵ From the outset, however, Brüning's policy was undermined by a contradiction. The deflation exempted agriculture. Indeed, his government had committed itself to stabilizing farm incomes by means of tariffs and price support. The bulk of working-class expenditure and the greatest weight in the Reichsindex was however assigned to foodstuffs. Not surprisingly, therefore, despite plunging prices for global commodities and industrial output, the Reichsindex of the cost of living remained stubbornly at pre-depression levels. Given its weighting scheme, even a halving in industrial prices would have reduced the overall Reichsindex by no more than ten percent. Brüning, however, convinced himself that there was foul play. At the 9 December Ministerial meeting he expostulated that: 'In carrying out individual statistical

¹³¹ R. Kregel, *Das Deutsche Institut für Wirtschaftsforschung (IfK) 1925 bis 1979* (Berlin, 1985), pp. 27-28.

¹³² *VzK* 5 (1930), 3, 1.12.1930 and *The Economist* 11.10.1930, pp. 663-664.

¹³³ *Die Kabinette Brüning*, vol. 1, Doc. Nr. 194 Cabinet Meeting 9.12.1930, p. 711.

¹³⁴ *Die Kabinette Brüning*, vol. 1, Doc. Nr. 194 Cabinet meeting 9.12.1930, p. 714.

¹³⁵ T. Koops (ed.), *Akten der Reichskanzlei, Weimarer Republik, Die Kabinette Brüning I u. II* (Boppard, 1982), vol. 1, Doc. Nr. 66 Ministerial meeting 8.7.1930, p. 267 and *Ibid.* Doc. Nr. 114 Ministerial meeting 16.9.1930, p. 429.

surveys the civil servants are refusing to record the actual prices. They are attempting to keep the cost of living index at an artificially high level. He [Brüning] will insist that checks be carried out on a sample of individual local authorities ... As long as this was not sorted out there would be no peace in the economy, particularly not in agriculture. Currently, the index numbers were nowhere near the real price level.¹³⁶

In the early years of the Weimar Republic, the statisticians and their cost of living index had been in no position to resist this kind of attack. By 1930 they were much better prepared for a trial of strength. At the invitation of the cabinet, Min. Director Hans Platzer, Vice-President of the SRA subjected the Chancellor to a lecture on the methodology of price statistics.¹³⁷ There could be no question that the reporting system of the SRA was open to manipulation. If anything, the local reports overstated the extent of deflation. The SRA itself was considering making changes to the index. In light of a new survey of working-class budgets there was clearly a need for reweighting. But the impact of this reform was uncertain. In the event, the new weighting scheme was not introduced until 1934. If it had been applied in 1930 it would have had the effect of raising the reported price level, not lowering it as Brüning had demanded.¹³⁸ Through a decade of painstaking technical and political work the SRA had acquired sufficient weight to make the government 'face' even the most disagreeable facts.

This did not, however, shield Wagemann's empire from Brüning's wrath.¹³⁹ With statistical spending at the Reich, Länder and Communes levels running towards 29.5 million Reichsmarks statistics were a prime candidate for austerity.¹⁴⁰ Already in 1928 the Sparkommissar had asked for a review, but had been blocked by the RWM.¹⁴¹ The Reich's budget for 1930 brought the first cuts to statistical funding since 1924. The most prominent casualty was the capstone of the macroeconomic program of the 1920s, the census of industrial production, which would not be carried out until 1933. With a view

¹³⁶ *Die Kabinette Brüning*, vol. 1, Doc. Nr. 194 Cabinet meeting 9.12.1930, p. 712.

¹³⁷ BAB, R 07.01/Film 19065N/2108, Bl. 174 'Sitzung des Reichsministeriums - Ministerbesprechung 28.2.1931'.

¹³⁸ BAB, R 07.01/Film 19065N/2110, Bl. 148 SRA 'Nachprüfung der Grundlagen der Reichsindexziffer' Statistisches Reichsamt, 'Neuberechnung der Reichsindexziffer für die Lebenshaltungskosten', *Vierteljahrshefte zur Statistik des Deutschen Reichs* 43 (1934), pp. 102-113.

¹³⁹ H. Brüning, *Memoiren 1918-1934* (Stuttgart, 1970), pp. 503-504.

¹⁴⁰ BAB, R 39.01/10683, Bl. 28 Dernburg Kommission, 'Bericht', p. 3.

¹⁴¹ BAB, R 01.01/Reichstag Film 31648/File 2588, Bl. 432, File 2589 No. 84 and BAB, R 23.01/2234, Bl. 113 Der Reichsparkommissar, 'Gutachten über den statistischen Dienst in Deutschland' (1933), p. 73.

to making more far-reaching incisions in future, Dr Bernhard Dernburg was appointed to head a Commission of Enquiry into the Statistical Service.¹⁴² Dernburg's Commission was charged with investigating the entire repertoire of statistics built up since the 1920s and devising a strategic plan with which to guide but also to limit the development of the Reich's Office.¹⁴³ The intention was clearly to put an end to Wagemann's freedom of action. After months of bureaucratic infighting, however, Dernburg produced only a very general report, which contained just one strategic suggestion. So that the SRA might be redirected towards the interests of the state strictly conceived, it must be separated from the IfK. In Dernburg's view the fusion between the two organizations had led the statistical apparatus to be dominated by the interests of academic economists. More seriously still, the prerogative of framing political decision-making previously reserved for civil servants was at risk of being usurped by experts and statisticians. The fiscal debates of 1930 and the far more public arguments that were to follow in 1932 would bear ample testimony to that. But the generality of Dernburg's recommendations was itself as a symptom of the problem. Why had he not been able to make more specific suggestions for cuts? When the Sparkommissar's office investigated it discovered that Dernburg's small enquiry team had been completely outgunned by Wagemann and his expert staff.¹⁴⁴ In 1932, to finish the job, the Savings Commissioner set about its own statistical review.¹⁴⁵ But this too ran into problems. The RWM was uncooperative.¹⁴⁶ And rather than accepting external suggestions, Wagemann responded with a rationalization memorandum of his own. Even the staff of the Savings Commission, veterans of countless bureaucratic battles, were struck by the aggressiveness of this reply.¹⁴⁷ Answering the advocates of economy in their own terms, Wagemann demanded that the Prussian Statistical Office should be incorporated into the Reich's Office and that the Offices of the other Länder be reduced to mere subsidiaries of the SRA. From the point of view of the Sparkommissar this was a poison chalice. Merging the Prussian office with

¹⁴² BAB, R 43I/965, Bl. 35 RWM to Reichskanzlei 3.6.1930.

¹⁴³ BAB, R 39.01/10683, Bl. 28 Dernburg Kommission, 'Bericht', p. 1.

¹⁴⁴ BAB, R 01.01/Film 31649/File 2590, Bl. 453. 'Drucksache Nr. 1428. Reichstag V. Wahlperiode 1930'.

¹⁴⁵ BAB, R 23.01/2234 Bl. 4 and Bl. 91.

¹⁴⁶ BAB, R 01.01/Film 31649/File 2590, Bl. 441.

¹⁴⁷ BAB, R 23.01/2234, Bl. 113 Reichssparkommissar, 'Gutachten über den Statistischen Dienst in Deutschland', (1933), p. 18.

the SRA might eliminate some overlap. But by enlarging Wagemann's domain it would only exacerbate the overall problem of financial control.¹⁴⁸

The strong defense of their bureaucratic domain mounted by Wagemann and the RWM could not prevent the fiscal squeeze of the early 1930s taking its toll.¹⁴⁹ From the budget of 1930 onwards each year brought cuts to the SRA.¹⁵⁰ Compared to July 1929 when the total white-collar staff of the SRA stood at 3,005 only 1,784 remained in July 1932.¹⁵¹ This was a dramatic reduction, but the vast bulk of the cuts were concentrated in Department VI, responsible for the statistics of tax revenues, where staff were slashed from 847 in December 1929 to 121 by July 1932. Economic statistics, the heart of Wagemann's project, survived largely unscathed.¹⁵² The IfK too was protected from the worst effects of the Depression.¹⁵³ The actual contributions received from the IfK's business backers were substantially lower than promised before the depression, but none of the major contributors formally withdrew. This continuity of support was essential to the Institute's survival, since any major withdrawal risked upsetting the delicate corporatist balance and provoking a chain-reaction.¹⁵⁴ In 1931, presumably to punish the Institute for its indiscretions in the preceding year, Brüning attempted to cancel the Reich's contribution. However, this was opposed both by the Prussian government and by Wagemann's friends in the Reichstag, who restored the Reich's contribution to its normal level of 100,000 RM.¹⁵⁵

Bureaucratic opposition to cuts was of course only to be expected. In the early phase of the recession there is no reason to believe that Wagemann and his statistical establishment were in any way determined on derailing or undermining Brüning's general policy of deflation. In fact, there was little contentious debate about economic policy in Germany during the first 18 months of the crisis. The severe downswing was only to be expected given the large adjustment required to Germany's balance of payments under the gold standard. Eventually, the recovery would come. But in the

¹⁴⁸ BAB, R 23.01/2234, Bl. 34 Reichssparkommissar, Note 23.9.1932.

¹⁴⁹ BAB, R 01.01/Film 31649/File 2590, Bl. 1 and 218.

¹⁵⁰ Reichstag budget Committee, BAB, R 01.01/Film 31649/File 2590, Bl. 302-441.

¹⁵¹ BAB, R 31.02/4169, 'Das SRA' and BAB, R 23.01/2234, Bl. 44e..

¹⁵² BAB, R 31.01/8654, Bl. 124 'Haushalt des RWM für das Rechnungsjahr 1932', preface, p. 2 and p. 27.

¹⁵³ GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 282 'Haushaltsplan des IfK 1930/31'.

¹⁵⁴ GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 340 and BBA 15 523 RDI to Fachgruppe Bergbau 9.4.1930.

¹⁵⁵ On the Prussian intervention see GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 1 Bl. 313-5. On the Reichstag: BAB, R 01.01/Film 31649/File 2590, Bl. 430.

summer of 1931 with the exchange and banking crisis that began in Austria, spreading to Germany and ultimately to Britain the “deflation consensus” shattered.¹⁵⁶ At first the fraying of the agreement around deflation was confined behind closed doors. But in January 1932, Ernst Wagemann’s willingness to announce a major financial reform proposal without authorization from the government, would play a crucial role in destroying the deflation consensus around Brüning. In so doing Wagemann and his staff not only breached disciplinary limitations on civil servants, and challenged a central pillar of government policy, they also slid from the domain of the RWM into that of the Reichsbank.

The warning signs were evident already in September 1930 when the Nazi electoral gains caused a panic in the financial markets. In the aftermath, one of Wagemann’s closer collaborators within the SRA, Dr Kurt A. Herrmann drafted a memo on the need to reinforce the intervention reserves of the Reichsbank. In particular he argued that the Reichsbank needed to free itself from the shackles of its 1924 statute so as to reinforce its foreign exchange reserves. The 1924 statute had simply repeated the founding statute of the Reichsbank of 1875, which had required that 40 percent of the value of banknotes in circulation be covered with gold and foreign exchange. This was a system well suited to an era in which banknotes were a currency of business and often used for international transactions. In modern Germany, by contrast, bank notes were overwhelmingly used for everyday consumer transactions. Business relied for its payments on cashless transactions through bank accounts. As a result that data showed that in both the recent periods of financial stress, in April 1929 and September 1930, when hundreds of millions of reichsmarks had fled the country, the volume of coins and banknotes in circulation had been entirely undisturbed. 1.6 billion Reichsmark in Reichsbank reserves had been tied down backing the cash money supply, whilst the Reichsbank had been forced to negotiate desperately with the big Berlin banks for funds with which to defend the international Reichsmark parity. In future, Herrmann argued, the Reichsbank should concentrate its reserves on backing not the cash in circulation but the deposits of Germany’s banks, which were the chief conduit for the 10 billion

¹⁵⁶ G.D. Feldman, 'From Crisis to Work Creation. Government Policies and Economic Actors in the Great Depression' in J. Kocka, H.-J. Puhle and K. Tenfelde (eds.), *Von der Arbeiterbewegung zum modernen Sozialstaat. Festschrift für Gerhard A. Ritter zum 65. Geburtstag* (München, 1994), pp. 703-718.

Reichsmark in foreign short-term loans that had flowed in through Germany's lop-sided balance of payments. Without this reinforcement to its currency reserve, Herrmann warned, any shift in German domestic policy that rendered foreigners uneasy would expose it to huge risks. Any assertive effort by Germany to revise the Young Plan would be met by a crippling foreign exchange crisis.¹⁵⁷

It was the kind of report one would expect from an opinionated Reichsbank official, not an official statistician. But it was typical of the kind of broad-brush thinking that the connection between the IfK and the SRA was encouraging amongst Wagemann's staff. Certainly, Herrmann's advice went unheeded. A high risk strategy of revision was precisely the path chosen by Bruening over the winter of 1930-1931, with former RWM now foreign minister Curtius very much in the lead. In the first months of 1931 inflammatory talk about Treaty revision combined with the revelation of the customs union plan with Austria to thoroughly spook the markets. When this was added to the predictable balance sheet effects of deflation the result was a panic that took down first the Austrian and then on 13 July 1931 the German financial system. Two days later an unnamed official within the SRA compiled what was bluntly titled a "Nationales Wirtschaftsprogramm". From its content and wording the author of this Programm, may have been Herrmann. The "Nationales Wirtschaftsprogramm" was subsequently developed into a brace of papers on the "Wiederherstellung der Reichsbank- und Bankenliquiditaet ueber den Rentenmarkt", "Kreditreform als Voraussetzung der Wirtschaftsgesundung" and a paper entitled "Kredit- und Waehrungsreform", all dated to October 1931. These preliminary papers remained confined to official circles. But they fed into the drafting of the document that in January 1932 would explode onto the national and international scene as Ernst Wagemann's Plan for *Geld- und Kreditreform* (Berlin, 1932)

The "Wagemann Plan" was subsequently to be inserted into the genealogy of proto-Keynesian "work creation" policy. And the Plan was certainly intended to stimulate the German economy. But, if we trace its origins back in the SRA archive to the summer of 1931 and view it in light of more recent experience with the banking crisis since 2007, we will come closer to the Plan's real intentions. What the Wagemann Plan proposed was

¹⁵⁷ BAB, R 3101/2591, Kurt A. Herrmann „Nach der Devisenkrise“ (1930), 538-559.

a wholesale restructuring of the German financial system necessitated by a disastrous financial crisis. Though its effect would hopefully be to stimulate business activity, it was a structural reform measure rather than a work-creation program. And it operated through the banking system not fiscal policy.

Developing the argument outlined by Herrmann in the aftermath of September 1930, the Wagemann Plan argued for a rearrangement of the foundations of the financial and monetary system. The small denomination cash in circulation would in future be backed by a perpetual government debt of 3 billion marks in long-term fixed interest bonds. Meanwhile, the Reichsbank would concentrate its gold and foreign exchange reserves on providing an ample 40 percent cover for large notes and the reserve deposits held with the Reichsbank by the commercial banks. New regulations would require banks to hold minimum reserves of between 3 and 10 percent of all deposits with the central bank, on the model of fractional reserve banking developed in Britain since the 19th century. To protect the essential functioning of the cashless, giro payments system that was vital for modern business, a further set of highly restrictive regulations would hive off the cashless payments system from the rest of banking business to ensure that its resources were strictly reserved for transactional purposes and not used to finance bank lending of any kind. Other deposits such as savings were to be backed by less stringent reserves and were free to offer interest rates rising with the length of term. The idea was to provide adequate central bank cover for international transactions, to shield the payment system, to restore confidence in the banking system and to channel different types of funds into appropriate forms of investment. The overarching aim was thereby to restore the equilibrating function of the interest in the capital markets, to revive the risk-return trade off and thus to ensure the smoother operation of the circular flow of savings, money balances and investments.

Wagemann did not deny that the aim of his proposal was to stop the deflation. The agenda for economic policy implied by Konjunkturforschung was activist. But he was at pains to point out that it did not involve inflation or “printing money”. The Plan hoped to achieve a de-icing of the German financial system above all through the realization that the most appropriate backing for cash in circulation, given its irreducible permanent quality were long-term government bonds. This promised real relief because

the curse that was paralyzing the German economy, visible in the data flowing into the SRA and the IfK, was a dangerous overhang of short-term unfunded debt obligations – owed by businesses, by government at all levels and by the banks themselves to their depositors. The Wagemann Plan proposed that the 3.3 billion RM owed in short-term loans by the Reich, Laender and Communes to the banking system should be converted into the long-term bonds held by the Reichsbank, as backing for the cash money in circulation. An even larger stimulative effect would be achieved once a new class of long-term government bonds established themselves as the basic investment of choice for the reserves required of banks, savings banks and insurers under the new system of regulations. In early drafts of the Plan, Wagemann's team at the SRA suggested requiring that the savings banks invest 70 percent of their deposits in the new class of government long-term paper.

This was an ingenious and well-worked out proposal, many of the provisions of which would subsequently be adopted by the Reich in the banking law of 1934. Though Wagemann was widely thought to be articulating the views of an advanced section of business opinion, it was SRA staff who appear to have worked out the details of the plan. But what connection, if any, did it have to the statistical research work of Wagemann's establishment? The answer is perhaps less apparent from the published version of the Wagemann Plan than from the internal drafts that preceded it. Whereas the published plan is a formal proposal including the suggestion of specific legislative amendments, the earlier papers are typical examples of the kind of research produced the SRA-IfK. They set the current crisis against the backdrop of the development of the German banking system since the 1870s. They offer elaborate schematic formalizations of the mismatch between different types of assets and liability within the system. They relate the imbalances within Germany's domestic credit economy to the peculiar disequilibrium of Germany's balance of payments, one of the key preoccupations of IfK-SRA analysis in the 1920s. But above all if we look beyond the technicalities of the Wagemann Plan to its political logic what becomes apparent is its continuity with the project of Konjunkturforschung

The sharp political edge to Wagemann's Plan was its indictment of the Reichsbank. The basic problem with the German financial system since 1924 was that it

was neither self-regulating, as classical economics imagined, nor did it provide the Reichsbank with adequate barometers with which to steer it through consciously directed counter-cyclical monetary policy. Even if it had wanted to, the Reichsbank of the 1920s had no effective means of conducting a counter-cyclical monetary policy. With its regulatory powers restricted to the cash money supply, the Reichsbank had the power to throttle a boom in its final stages, but not to moderate the cycle. Only at the very peak of the upswing did the upsurge in activity impose a serious strain on the cash money supply. Only then did the Reichsbank's reserves requirements have any real bite. Short of the crisis the Reichsbank could regulate economic activity only by restricting the influx of foreign credits or by using its political influence to limit public borrowing. Wagemann's Plan did not hold out the vain promise of restoring an automatic gold standard. "Es liefert nur eine bessere konjunkturelle Orientierung und schärfere Einwirkungsmöglichkeiten."¹⁵⁸ Under the new system the central bank would be in a position to elastically adjust the entire credit economy. And here Wagemann's ambition shone through. "Die Zeit ist hoffentlich nicht fern, in der man es fuer unglaublich halten wird, wenn eine Zentralbank sich nicht alle Methoden des modernen Konjunkturdienstes zunutze macht ...". This was a pointed remark. The Reichsbank had always been a generous donor to the Institute, but hitherto it had regarded the work of Konjunkturforschung with scepticism.¹⁵⁹ The basic goal of the reform was therefore to put business-cycle research in charge of monetary policy. Seen in these terms, Wagemann's Plan was an intervention of truly breath-taking audacity. Whilst the Sparkommissar Friedrich Saemisch and Dernburg's Review Commission were trying to cut the research establishment down to size, whilst Bruening was determined to curtail the influence of Konjunkturforscher, Wagemann's plan proposed to use the opportunity of the crisis for a wholesale restructuring of the financial system designed to make it both more legible for and more subject to manipulation by business-cycle research.

Given its highly technical content, the political impact of the Wagemann Plan was remarkable. Since the autumn of 1931 Germany had been abuzz with schemes for

¹⁵⁸ Wagemann, *Geld- und Kreditreform*, 56.

¹⁵⁹ See for instance BAB, R 25.01/6472, Bl. 311 Stat Abteilung der Reichsbank 'Soll die Reichsbank Konjunkturpolitik treiben?' 9.6.1928.

reflation and Wagemann's was far from being the most radical.¹⁶⁰ The basic structure of banking regulation that Wagemann proposed was sound. The Reich's banking law of 1934 adopted many of his proposals. Work-creation was no more than a side effect of his Plan. What set Wagemann apart was not the substance of its proposals but the fact that its author had the capacity to do the government real political damage. The most obvious comparison is with Wilhelm Lautenbach whose thinking about work-creation expenditure was far more adventurous than anything offered by Wagemann.¹⁶¹ It was Lautenbach's plans that were the subject of the secret conferences hosted by Luther and Schäffer in the autumn of 1931. But the significant difference is that none of those discussions were disclosed to the public. And even if Lautenbach had had the personal courage to publicize his proposals, he would have had to find a platform. By contrast, Wagemann as Director of the Institute for Business-Cycle Research and President of the SRA he had built up an unrivalled network of contacts in politics and business as well as privileged access to the media. He released his proposal for credit-reform without prior consultation with the cabinet. In advance of his speech he scheduled a full-scale press conference at the Statistical Office. The Wagemann Plan was rapidly translated into English and copies were printed by the Reich's printers.¹⁶²

Mistrust towards Wagemann's research empire had been mounting within the Bruening cabinet since 1930. In October 1931 when Bruening had reshuffled his cabinet it had appeared that the balance might be tilting in favour of activism. But what appeared to have broken out in the early months of 1932 was open political warfare. With the Chancellor's full support, Reichsbank President Luther initiated damage control.¹⁶³ Brüning ordered Wagemann's press conference to be cancelled and insisted on a disclaimer, distancing the government from his Plan. Reichsbank President Luther doggedly reasserted the line that forms of credit reflation amounted to irresponsible inflation.¹⁶⁴ Anxious international observers were reassured that Wagemann's Plan did not enjoy the backing of the cabinet. Luther persuaded Benjamin Anderson, the chief

¹⁶⁰ For a review of the alternatives see R. Meister, *Die große Depression*, p. 280-393.

¹⁶¹ W. Lautenbach, *Zins, Kredit und Produktion*, ed. W. Stützel (Tübingen, 1952).

¹⁶² Schulz, *Von Brüning zu Hitler*, pp. 737-740.

¹⁶³ *Die Kabinette Brüning*, vol. 3, Doc. 651 and G. Schulz, I. Maurer and U. Wengst (eds.), *Politik und Wirtschaft in der Krise 1930-1932. Quellen zur Ära Brüning* (Düsseldorf, 1980), vol. 2, Doc. 412 and *Ibid.*, Doc. 414.

¹⁶⁴ R. Meister, *Die große Depression*, pp. 343-351.

economists of Chase National Bank, the spokesman for Germany's foreign creditors, to step in on the government's side.¹⁶⁵ Anderson was well-versed in German language economics, particularly of the conservative Austrian variety. He would oppose FDR's New Deal as vigorously as he attacked Wagemann's Plan. He was to be one of the main conduits through which Ludwig von Mises's economics would reach conservative circles in the United States in the 1930s.¹⁶⁶

Amongst Germany's own business community, the reaction to the Wagemann Plan was mixed. Wagemann's pamphlet thanked an influential circle of managers around IG Farben. But, the RDI leadership was adamant in its support for Brüning and reactionaries such as Paul Reusch took the lead in denouncing Wagemann's unreliability and disloyalty. Heavy industrial spokesmen in the Ruhr demanded his resignation and slashed the Institute's funding.¹⁶⁷ The academic opponents of Konjunkturforschung scented blood in the water.¹⁶⁸ The Dernburg Committee had noted in 1930 the rising tide of academic resentment against the Institute.¹⁶⁹ In 1932, Wagemann faced a carefully stage-managed outcry of academic opinion. The high-point came in May, when a newspaper well known for its links to heavy industry published a 'Declaration by 32 Economists' denouncing the Wagemann Plan as folly and as an act of disloyalty that was incompatible with Wagemann's continued employment as a civil servant.¹⁷⁰

Whatever the technical merits of the Wagemann Plan, the accusations of disloyalty were to the point.¹⁷¹ Though the evidence is fragmentary there is little reason to doubt that in the course of 1932 Wagemann drifted into the circles of the National

¹⁶⁵ Kroll, *Von der Weltwirtschaftskrise*, p. 402.

¹⁶⁶ "An interview with Henry Hazlitt" *Austrian Economics Newsletter* 5,1, (Spring 1984) at https://mises.org/sites/default/files/aen5_1_1_1.pdf

¹⁶⁷ GStA I Rep. 120 C VIII 2a Nr. 33 Bd. 2 Bl. 16 'Haushaltsplan des IfK 1932/3'.

¹⁶⁸ C.-D. Krohn, *Wirtschaftstheorien*, pp. 157-166.

¹⁶⁹ BAB, R 39.01/10683, Bl. 28 Dernburg Kommission, 'Bericht', p. 27.

¹⁷⁰ BAB, 62 DAF 3 17502, Bl. 69 *Kölnische Zeitung*, 640, 22.11.1932 'Wagemann und die Wirtschaft'. Ibid., No. 35 *Deutsche Allgemeine Zeitung*, 549, 23.11.1932 'Auseinandersetzung mit Wagemann'. Ibid. No. 36 *Tägliche Rundschau*, 276, 23.11.1932 'Vorstoß gegen Wagemann'.

¹⁷¹ K. Borchardt, 'Noch Einmal: Alternativen zu Brüning's Wirtschaftspolitik?', *Historische Zeitschrift* 237 (1983), p. 78.

Socialist opposition.¹⁷² Wagemann's contacts ranged across the bandwidth of Hitler's movement. The Plan for credit creation established a link to Gregor Straßer's on the left wing of the party, the most vocal advocate of work creation.¹⁷³ Wagemann was also connected to Gottfried Feder the senior economic ideologue of Hitler's movement.¹⁷⁴ And on the conservative wing Wagemann's was closely linked to Walter Funk, the economic journalist who served as one of the Party's more respectable economic advisors¹⁷⁵ From later correspondence it seems that Wagemann also had personal dealings with Hitler on at least one occasion prior to 1933.¹⁷⁶ Later press reports claimed that Wagemann had threatened to resign from his post as director of the National Electoral Commission in protest at the efforts of the Interior Ministry to exclude Hitler from the presidential election of March 1932.¹⁷⁷

There is nothing to suggest that these moves on Wagemann's part were in any sense a necessary development. Reports from within the Nazi party itself describe Wagemann as opportunistic. But there was more to his manoeuvring than merely the search for power and influence. Wagemann was an activist but he was also a knowledgeable economist, a man able to judge the room for manoeuvre available to the German government. In May 1931 Wagemann had still been willing to bet on the survival of the international economy. It was the financial crises between June and September 1931 both in Germany and in Britain and the refusal of the Brüning government to react decisively to them that propelled Wagemann into the nationalist camp.¹⁷⁸ It was the comprehensive breakdown of the international currency system that convinced him that a period of relative economic isolation was essential to allow the

¹⁷² W. Jochmann, 'Brünings Deflationspolitik und der Untergang der Weimarer Republik' in D. Stegmann, B.-J. Wendt and P.-C. Witt (eds.), *Industrielle Gesellschaft und politisches System. Beiträge zur politischen Sozialgeschichte* (Bonn, 1978), pp. 97-112. A. Barkai, *Das Wirtschaftssystem des Nationalsozialismus. Ideologie, Theorie, Politik 1933-1945* (Frankfurt, 2nd ed. 1988), p. 49 and U. Kissenkoetter, *Gregor Straßer und die NSDAP* (Stuttgart, 1978), pp. 104-108.

¹⁷³ U. Kissenkoetter, *Gregor Straßer*, pp. 105-107. Kregel, *Das Deutsche Institut*, p. 54 suggests that Wagemann was involved in secret talks with Schleicher and Straßer in 1932/33 with the aim of keeping Hitler out of power. Kregel dates the last meeting with Straßer as 16 January 1933. For a sceptical analysis of the real import of Straßer's 'connections' see G. Schulz, *Von Brüning zu Hitler*, pp. 975-978.

¹⁷⁴ BAB, R 43II/1157e, Bl. 3 NSBO/SRA to Göring 28.2.1933.

¹⁷⁵ BAB, R 43II/1157e, Bl. 23 Wagemann to Reichskanzler Hitler 23.3.1933.

¹⁷⁶ BAB, R 43II/1157e., Bl. 26 Wagemann an Reichskanzler 28.3.1933.

¹⁷⁷ BAB, 62 DAF 3 17502, Bl. 53 *Tägliche Rundschau*, 80, 4.4.1933 'Wirrwarr um Wagemann'.

¹⁷⁸ E. Teichert, *Autarkie und Großraumwirtschaft in Deutschland 1930-1939. Außenwirtschaftliche Konzeptionen zwischen Wirtschaftskrise und Zweitem Weltkrieg* (München, 1984), p. 93 and BA 62 DAF 3 17502 No. 75 *Kölnische Zeitung*, 175, 31.3.1932 'Propaganda der Autarkie'.

nation state the freedom necessary to resolve the triple crisis of finance, industry and agriculture. It was the sense that the nation state must act, that drove Wagemann like so many others towards the Nazis.

Wagemann was not known for his close relations with the staff of the SRA, but he cannot have been oblivious to the fact that under the weight of the crisis, the statistical office was becoming a microcosm of the political pressures building up within Weimar Germany. The rapid expansion of the office in the 1920s had left a large gap between the new junior appointments and the overworked departmental Directors. The Savings Commissioner's rolling reviews spread anxiety amongst the clerical grades who would be the first to face the axe.¹⁷⁹ Abusive graffiti were scrawled on office walls. Statistical returns were vandalized.¹⁸⁰ The elected representatives of the statistical staff struggled to channel the discontent into formal structures.¹⁸¹ Ugly rumors spread about Wagemann and his clique of privileged and well-connected officials. A low point was reached in 1930, when the overworked Director of tax statistics committed suicide.¹⁸² The funeral degenerated into a nationalist demonstration. By May 1930, Social Democrats on the Reichstag Budget Committee were warning that the SRA was a hotbed of Nazi agitation.¹⁸³ The Social Democratic chair of the elected Staff Council (Beamtenrat) faced constant harassment from Nazi activists. The dramatic redundancies of 1931 can hardly have calmed nerves. By 1933 a substantial Nationalsozialistische Betriebszellen-Organisation (NSBO) was at work within the Reich's Statistical Office.¹⁸⁴

When the Machtergreifung began in early 1933 it was the tensions built up during the period 1930-1933 that would decide the SRA's fate. Ernst Wagemann had every reason to expect great things from the new regime. But for him personally it would prove disastrous that the position as Reichswirtschaftsminister in Hitler's first coalition cabinet went not to a Nazi but to Alfred Hugenberg of the DNVP. Wagemann was many things but he was no friend of the arch conservatives and agrarians. Hugenberg's animus was then driven home by an opportunistic mobilization from below within the Office itself by

¹⁷⁹ BAB, R 31.02/5665, Bl. 1 *Mitteilungsblatt für Beamte und Angestellte beim SRA 1* (1927), 2, p. 4.

¹⁸⁰ BAB, R 01.01/Film 31648/File 2589, Bl. 84 `16. Sitzung des Haushaltsausschusses vom 21.1.1929", p. 8.

¹⁸¹ BAB, R 31.02/5665, Bl. 20 *Mitteilungsblatt für Beamte und Angestellte beim SRA 2* (1928) Nr. 2, p. 4.

¹⁸² BAB, R 01.01/Film 31649/File 2590, Bl. 218.

¹⁸³ BAB, R 01.01/Film 31649/File 2590, Bl. 218 `Reichstag IV. Wahlperiode 1928. 5. Ausschuß für den Reichshaushalt. 150. Sitzung 9.5.1930', p. 15.

¹⁸⁴ BAB, R 43II/1157e, Bl. 3 NSBO SRA to Göring 28.2.1933.

ambitious NSBO activists. It was this combination which accounted for Wagemann's surprising suspension from all his offices on 17 March 1933. In the conservative papers his removal was heralded as a clear indication that Hitler's government rejected economic planning.¹⁸⁵ Elsewhere, Hugenberg was criticized for a high-handed decision that ran contrary to the intentions of the Führer. Wagemann did not go quietly. He was most likely the only German academic victimized in 1933 who was able to mobilize support both from Harvard and the Rockefeller Foundation and Hitler's Reichs Chancellory.¹⁸⁶ Hitler's office made it clear that they did not want to see Wagemann pensioned off or insulted with a junior position.

The escape from this embarrassing impasse was found by implementing one of the most dramatic proposals advocated by Dernberg and the Reichssparkommissar: the separation of the IfK from the SRA. This was damaging to both sides. The IfK lost access to the richest data sources and the SRA was deprived of macroeconomic guidance. By the late 1930s this would lead to disastrous derailments in the politics of German official statistics. And the separation would in effect be reversed in 1943 when the Albert Speer's Planning staff made the IfK, by then renamed as the DIW, into the command center of economic expertise in the German war effort. As for the SRA, the institutional separation did not break the momentum of its expansion. The office soon began to expand rapidly again. As part of the rearrangement of power between the Laender and the Reich, the SRA realized Wagemann's long-held goal and swallowed the Prussian statistical office. By 1939 it would not only make good the losses after 1929 but expand to no less than 6000 staff. An energetic cohort of statisticians stood ready to place the conceptual and empirical tools of macroeconomic research inherited from the Weimar Republic at the service of national reconstruction and rearmament.¹⁸⁷

¹⁸⁵ BAB, 62 DAF 3/17502, Bl. 32 *DAZ* 131 18.3.1933 'Unsere Meinung'. BAB, 62 DAF 3/17502, Bl. 53 *Tägliche Rundschau* 80 4.4.1933 'Wirrwarr um Wagemann'.

¹⁸⁶ BAB, 62 DAF 3/17502, Bl. 51 *Tägliche Rundschau* 99 28.4.1933 'Harvard-Institut ehrt Wagemann'. For the correspondence between the Chancellory and the RWM see BAB, R 43II/1157e, Bl. 49-103.

¹⁸⁷ A Tooze, *Statistics and the German State* (Cambridge, 2001).