

Disintegration

Doom did not descend on the Third Reich with a single blow. It struck at irregular intervals and shifted from one theatre to another. In between, there were moments of relief during which Speer, Goebbels and the rest did their best to rekindle the flame of fanatical belief. July 1943 had seen a nightmarish coincidence of setbacks on every front: in the air war, in Italy and at Kursk. In the East, the six months that followed brought a seemingly endless retreat. Nevertheless, by frantic manoeuvring, Army Group South somehow managed to end 1943 still in control of the vital iron and metal ore deposits of the Ukraine.¹ This kept alive the hopes of the German war economy, at least for a few more months. Even in Italy, Mussolini's demise did not spell immediate calamity. Making best use of the impassable terrain and Allied caution, a modest Wehrmacht contingent of 20 divisions was able to stop the British 8th Army well short of Rome and to contain the under-strength American landing at Anzio.² Meanwhile, as the autumn wore on, the nightmare of Hamburg lifted. Instead of concentrating on industrial targets in western Germany, RAF bomber command exhausted itself in the perverse attempt to 'win the war' by wrecking Berlin.³ There were nights when British aim was good and terrible damage was done to the 'big city'. On 22 November 1943 Harris's bombers killed 3,500 people, left 400,000 homeless and scored direct hits on the administrative centre of German government, including the offices of Speer's Ministry and army procurement.⁴ But over many months, thanks to constant evolution of tactics and technology, the German night fighters were able to keep the upper hand.⁵ By the end of 1943 the Allied bombers were still not winning the war. For a few precious weeks the leadership of Nazi Germany recovered its breath. The sense of powerlessness and defeat receded into the background. Speer even attempted to lift the mood with

THE WAGES OF DESTRUCTION

a series of conferences about post-war reconstruction.⁶ At OKW, Alfred Jodl optimistically discussed the protective buffer provided to Germany by the gigantic territory of the Soviet Union. No enemy thrust in 1944 could be immediately fatal. The chief vulnerability were the oilfields of Romania, Germany's one source of imported petrol.⁷

Nor was this lost on the Soviets. On Christmas Eve 1943 they set about breaking the bloody stalemate in the South. Pounding attacks on the Zhitomir-Kiev axis threatened to turn the northern wing of German Army Group South. But still the Germans clung to the ore mines in Nikopol and Krivoi Rog. Only in February was their grip finally broken and the Wehrmacht driven back once and for all from the Dnieper bend.⁸ Army Group South's front line, though intact, was now suspended dangerously between Ternopol and the Black Sea, with no natural defensive position of any kind. Again, the Red Army took full advantage. On 4 March 3rd Guards Tank Army sliced due south from Ternopol unhinging the entire German position in the Ukraine. Pressured all along the front line, struggling to keep a grip on their Romanian allies, the Germans reeled backwards first across the Bug and then the Dniester. And even on that last, vital river line they were unable to prevent the Red Army from seizing bridgeheads, the launching pads for the next thrust into Romania.⁹ When that came, as Jodl had acknowledged, it would strike a fatal blow to the German war effort. The more immediate threat, however, in the first months of 1944, was the imminent defeat of the Luftwaffe. In early 1944, the US Army Air Force dramatically turned the tables in the daytime battle by introducing a new generation of long-range escort fighters with performance substantially greater than Milch's outdated Messerschmitts. Literally thousands of Mustang P51S equipped with disposable fuel tanks now accompanied the bombers deep into Germany and picked off the Luftwaffe's interceptors before they even got close to the bomber streams. 'Big Week' - 20-25 February 1944 - is commonly regarded as the critical turning point in the air war.¹⁰ On six consecutive days, thousands of American bombers were hurled against all the major aircraft factories in Germany. The Luftwaffe was not destroyed in a single week. However, the US Army Air Force gave notice that the Germans would now face an utterly unsustainable rate of attrition. In February the Luftwaffe lost one-third of its fighters and a fifth of its crews. In March, it lost more than half its fighter aircraft. In April 43 per cent were shot down and in May and June the

DISINTEGRATION

loss rate hovered around 50 per cent. Over the first five months of 1944 the Luftwaffe's entire complement of fighter pilots was either killed or disabled. A few German aces survived long enough to notch up extraordinary tallies but the working life of the average Luftwaffe pilot was now measured in weeks.¹¹

I

Faced with the imminent extinction of the German air force, the Reich Air Ministry followed the navy in offering to throw in its lot with Speer's Armaments Ministry. The result was the formation of the so-called Jaegerstab (Fighter Staff). Nominally, the Jaegerstab was headed by Albert Speer. But in the first weeks of 1944, exhausted by overwork, Speer suffered a physical collapse. Until early May, he was removed from day-to-day business in Berlin. Having 'surrendered' the independence of the Air Ministry, Erhard Milch therefore remained effectively in control of Luftwaffe production at least until the summer.¹² Now, however, he was able to call on the brutal energies of Karl Otto Saur, a squad of senior officials from Speer's Ministry, and the particular expertise of SS General Kammler. Equipped with undisputed priority in the entire armaments effort, empowered to take any measures necessary to raise production, the Jaegerstab successfully revived the 'armaments miracle'. Measured in terms of airframe weight, aircraft output doubled between February and July 1944. The increase in the number of aircraft produced was even more spectacular - from 1,323 in February 1944 to 3,538 aircraft by September, of which almost 2,900 were fighters.

It was this sudden and late burst in aircraft production to which the Speer Ministry owes its legendary reputation. As things stood in January 1944, German armaments output after two years of Speer's leadership was 'only' 130 per cent higher than it had been when he took office.¹³ Since the traumatic events of July 1943, there had been no sustained progress whatsoever. Suddenly in February 1944 the armaments output index, which was now being calculated on a regular basis by Hans Kehl's planning office, shot upwards, by almost 50 per cent in only five months. Relative to an index of 100 when Speer took office, the armaments index which stood at 230 in February 1944 rose to a record level of 330 in July 1944. Two-thirds of this increase was attributable

to the last-minute triumphs of the Jaegerstab. And Speer and Saur were clearly well aware of the importance of this remarkable late surge to the reputation of their Ministry. It formed the ideal concluding chapter in the propaganda narrative of the armaments miracle. One by one the Armaments Ministry had taken in hand the key elements of the German war effort: first the army and the Reichsbahn, then the Panzer programme, then the U-boat programme, followed by the miracle of the Mittelbau and the V2. Now Speer and his men would bring salvation to the Luftwaffe. And their secret of success was always the same, 'rationalization' combined with the 'self-responsibility of industry'.

Inexplicably, the Allied interrogators who began picking over the ruins of the German war economy in 1945 took this story at face value, choosing to make Karl Otto Saur, of all people, into one of their chief sources of information on the German war effort.¹⁴ In fact, as was true of the U-boat programme and the Adolf Hitler Panzer Programme before it, the Saur-Speer version of the Jaegerstab's history should be approached with extreme caution. What is indisputable is that the Jaegerstab brought a new measure of coercive violence to the armaments economy and that this extended across the board to German management, to the German workforce, but most of all to the various grades of foreign labour employed in Luftwaffe production.¹⁵ Milch was charged with crimes against humanity in this connection before the Nuremberg tribunal. How Saur escaped the dock is hard to fathom. In the case of the Jaegerstab, the system of 'industrial self-responsibility' touted first by Todt and then by Speer quite definitely mutated into dictatorship uninhibited by any rule of law or code of civilization. After the first wave of American bombers struck at the end of February 1944, Saur and Milch toured all the aircraft factories in a special train, code-named Hubertus, from which they dispensed summary justice to plant managers they considered to have failed in their duties.¹⁶ At Regensburg they court-martialled two German contractors for allegedly holding up the reconstruction of the Messerschmitt plant by demanding reasonable accommodation for their German workers.¹⁷ On 25 March Erhard Milch addressed an audience of air force engineers and chief quartermasters and introduced them to the work of the staff in the most drastic terms:

Please go wherever you are going and knock down everybody who blocks your way! We cover up everything here. We do not ask whether he [sic] is allowed to

DISINTEGRATION

or whether he is not allowed to. For us, there is nothing but this one task. We are fanatics in this sphere . . . No order exists which could prevent me from fulfilling this task. Nor shall I ever be given such an order ... do not let anything deter you, and get your people to the point that no one deters them . . . Gentlemen, I know, not every subordinate can say: For me, the law no longer exists . . .

Such weaker souls needed 'someone who covers up for him .. . If . . . you keep in touch [with the Jaegerstab] and immediately clarify difficult points so that something can be done, then we are willing to accept responsibility, whether this is the law or not.' Germany's survival dictated a system completely unfettered by anything other than the priority of production. With the Luftwaffe losing half its planes every month, Milch could see

only two possibilities for me and for Germany: either we succeed and thereby save Germany, or we continue these slipshod methods and get the fate that we deserve. I prefer to . . . [be] ... doing something that is against the rules but that is right and sensible and be called to account for it and, if you like, hanged, rather than be hanged because Papa Stalin is here in Berlin, or the Englishman. I have no desire for that . . . We are in the fifth year of war. I repeat: the decision will come within the next six weeks!¹⁸

The first key to increased production was clearly an increased work-rate. Across the aircraft and aero-engine facilities, a seventy-two-hour week was the norm from the spring of 1944 onwards. On the model of the Adolf Hitler Programme this gruelling pace of work was sustained by supplying favoured employees with extra rations of food, sweets, cigarettes and spirits, pullovers, warm underwear, socks and even special allocations of vitamin pills.¹⁹ These bonuses, however, were reserved in large measure for the German workforce and the very best performing foreigners. For the rest, Milch and Saur offered only the most severe discipline. Foreign workers, Milch complained,

run away. They do not keep to any contract. There are difficulties with Frenchmen, Italians, Dutch. The prisoners of war are ... unruly and fresh. These people are also supposed to be carrying on sabotage. These elements cannot be made more efficient by small means. They are just not handled strictly enough. If a decent foreman would sock one of those unruly guys because the fellow won't work, then the situation would soon change. International law cannot be observed here. I have asserted myself very strongly, and with the help of Saur

THE WAGES OF DESTRUCTION

I have very strongly represented the point of view that the prisoners, with the exception of the English and the Americans, should be taken away from the military authorities. Soldiers are not in a position, as experience has shown, to cope with these fellows. I shall take very strict measures here and shall put such a prisoner of war before my court martial. If he has committed sabotage or refused to work, I will have him hanged, right in his own factory. I am convinced that that will not be without effect. (*Italics in original.*)

The methods of Kammler's Mittelbau were thus extended to the entire Luftwaffe sector.²⁰

This increasingly draconian attitude to labour discipline reached its limit in the drive to mobilize the reserves of concentration camp labour. A fortnight after the establishment of the Jaegerstab Himmler wrote to Milch to inform him that the Luftwaffe was currently employing 3 6,000 concentration camp inmates in its factories and that he hoped to raise this in the near future to 90,000.²¹ As an example of a productive collaboration, Himmler cited the case of Messerschmitt's fighter plant at Regensburg, which had entered into a sub-contracting deal with the Flossenbuerg concentration camp. Instead of working in the notorious quarry, the inmates at Flossenbuerg were now producing aerodynamic engine cowlings and radiator covers for Me 109s. In February Regensburg also started drawing parts of the fuselage from the Mauthausen camp. By the summer of 1944, it is estimated, 3 5 per cent of the output credited to Messerschmitt's Regensburg factory was, in fact, due to its SS sub-contractors.²² Whilst they were contributing in this fashion to the production records of the Speer Ministry, Flossenbuerg and its Aussenlager consumed the lives of at least 20,000 people, in addition to the many thousands more who died at Mauthausen.²³

Though concentration camp inmates had become increasingly ubiquitous in armaments production, up to the spring of 1944 Jewish inmates, the lowest category in the Nazi racial hierarchy, had been debarred from such employment. The Jaegerstab broke even this ideological taboo. To ensure that it played its part in the defence against the Red Army, Hungary was militarily occupied by the Wehrmacht on 19 March 1944. Within weeks, the possibility of employing hundreds of thousands or Hungarian Jews for war work was being excitedly discussed in the Fuehrer headquarters.²⁴ The first priority for the allocation of Jewish labour were Kammler's gigantic underground building sites, but given

the emergency facing the Luftwaffe the possibility of employing Jews in aircraft factories was no longer ruled out. Eichmann began the deportation of Hungarian Jewry, at the rate of 12,000-14,000 per day, in mid-May. According to the familiar principle of 'Selektion', the majority would be gassed. However, at least a third were expected to be suitable for forced labour in the Reich. Auschwitz was to serve as the 'collecting camp' for the incoming transports. Those chosen for work were to be allocated directly to Sauckel, the Todt construction organization, or other high-priority employers, such as the Jaegerstab.²⁵ It is estimated that of the 509,000 Jews eventually deported from Hungary, more than 120,000 survived the war as forced labourers.²⁶ In the Jaegerstab, the employment of Hungarian Jews was discussed first on 26 May 1944, the first meeting attended by the rejuvenated Albert Speer. The Jaegerstab was anxious to know what number of Jews they could expect and heard a report from an official who was clearly in regular contact with Auschwitz. With Eichmann's transport operation eleven days old, the news from the camp was not good. From the first arrivals, the Armaments Ministry had been offered only 'children, women, and old men with whom very little can be done'. The best male labour, it seems, was being retained in Hungary, digging tank traps for the Wehrmacht. The minute concluded laconically that: 'Unless the next transports bring men of an age fit for work, the whole action will not have much success.'²⁷ At this stage in the war nobody can really have been in any doubt about the fate of those Jews who were not considered fit for employment. But that did not concern Speer or the Jaegerstab. A month later the flow of human material was improving and the Jaegerstab was pleased to learn that Auschwitz was now ready to make good on its promises. In particular, the SS were hoping to deliver '13,000 Hungarian Jewesses in batches of 500. Thus the smaller firms, too, will be in a position to employ these concentration camp Jewesses better.'²⁸

But coercive labour discipline and the mobilization of tens of thousands of concentration camp inmates can only go so far in explaining the remarkable increase in aircraft production in the first half of 1944. And Karl Otto Saur, when he was explaining the triumphs of the Jaegerstab to his credulous interrogators from the Bombing Survey, not surprisingly focused on other issues. According to his version of events, the key to the Jaegerstab's success was the 'total revolution' which it brought about in aircraft production, a 'singular' intervention, with 'decisive

effects'.²⁹ Prior to 1944, Saur claimed, aircraft production had been feather-bedded. It was only the decisive action of the Speer Ministry that forced the industry to focus all its attention on maximizing output. In making these claims, however, Saur was doing little more than reciting the standard propaganda line. The suggestion that Luftwaffe producers, who since 1941 had been under the thumb of men like Karl Frydag (airframes) and William Werner (power plants), had much to learn about rationalization from Karl Otto Saur is implausible, to say the least. And not surprisingly, perhaps, the officials of the Reich Air Ministry took a rather more jaundiced view of the hype surrounding the Jaegerstab's achievements. Perplexed by the production records being claimed by Saur, the Air Ministry in the summer of 1944 undertook a close analysis of the sudden miraculous increase in production that had taken place since Speer's men had taken over. As their report makes clear, it is not only the criminal immorality of the Jaegerstab that deserves critical scrutiny.³⁰

For one thing, Saur's story took no account of the inevitable time lags in aircraft production. Even the simplest fighter took six months to produce, from raw material to finished machine. Since the Jaegerstab itself came into existence in February of 1944, the measures it had taken and the resources it had mobilized could not show their full effects before August 1944. A large part of the increase in production up to July 1944 could only be explained in terms of measures taken prior to the formation of the Jaegerstab. Most importantly, the Air Ministry in the course of 1943 had extracted 317,000 workers from Sauckel for the Luftwaffe industries, in addition to 243,000 workers obtained on its own initiative. Amongst this number the Air Ministry claimed 'credit' for the extra 100,000 concentration camp inmates supplied by the SS in 1943 and 1944. The Ministry had also set in motion the expansion in aero-engine production, without which the huge surge in aircraft output in 1944 would not have been possible. What rankled most of all, however, was the inconsistent attitude of the Speer Ministry. The essence of Saur's story was that it was only the 'lightning-fast response' of Speer and his staff that had saved the Luftwaffe from immediate disaster in February 1944.³¹ But this ignored the fact that in the early autumn or 1943, in the immediate aftermath of Hamburg, the Air Ministry had drafted its own plan to bolster Germany's fighter defences.³² The draft version of the so-called Reichsverteidigungsprogramm (Luftwaffe pro-

gramme 2.2.4) had called for monthly production by July 1944 of no less than 5,390 aircraft, of which two-thirds were to be fighters. A key part of this programme was to be a sharp reduction in the production of older models, in favour of the accelerated mass-production of the Me 262 jet fighter. But rather than assisting Milch in the implementation of this crucial production drive, Speer had conspired with Willy Messerschmitt to unseat the priority of the Me 262. Meanwhile, Saur and his 'rationalization experts' declared the production targets to be unachievable.³³ The autumn was filled with acrimonious meetings, in which Speer launched a dramatic personal attack on William Werner, the same man who two years earlier had been universally acclaimed as the leading expert on mass-production, the same man to whom Speer in 1943 had personally entrusted overall responsibility for the production of motors, even over the protests of Maybach, the established monopolist in the tank sector.³⁴ It was only in February 1944, once control over aircraft production had passed to the Speer Ministry, that everything suddenly changed. Not only did Speer's Jaegerstab take credit for the resources accumulated by the Air Ministry in 1943. Saur and his cohorts were also free to adopt a programme in the summer of 1944 (programme 226) that was virtually identical to the 'impracticable' Air Ministry proposal of nine months earlier.

Though the Air Ministry obviously had its own axe to grind, the Jaegerstab's claims on behalf of the 'Speer system' clearly do need to be regarded with scepticism. The Air Ministry had prepared the way for the dramatic discontinuity in aircraft production in early 1944 with its initiatives in the second half of 1943. By contrast with the rhetoric of violent urgency that accompanied the actions of the Jaegerstab in 1944, they had received little or no assistance in this effort from Saur and Speer. Only when Milch surrendered and agreed to share control of the Luftwaffe sector was Speer willing to allow aircraft production to benefit from the full authority of the Reich's Armaments Ministry and the practical benefits that conferred. Even in 1944 there were no miracles of rationalization. Contrary to Saur's assertions, aircraft production clearly did not levitate. Though the confusion of 1944 makes a precise accounting impossible, it is clear that the unlimited powers of the Jaegerstab enabled it to back up the increased production of Me 109s and FW 190 fighters with an unprecedented quantity of raw materials, labour, food and transport capacity. In fact, Speer himself confirmed this

interpretation in an unguarded comment to journalists in June 1944. To explain the extraordinarily robust rebound in aircraft production, he commented: 'I have to add... that here an alteration in the system has taken place on the quiet, in that from February we have, as we have done in the other industries, brought in capacities from the armour and Panzer industries into the aircraft industry. This is the reason, in my opinion, for the speedy recovery.'³⁵ As the confidential diary of the Speer Ministry frankly admitted, the uncanny robustness in tank production in 1943, in the face of sustained Allied bombing, had depended on Speer's ability to support the Main Committee with extra rations of steel, drawn from 'secret sources' known neither to Kehrl nor the Zentrale Planung. Now the Jaegerstab benefited from the same slush funds. As the Air Ministry had suspected, it was Speer's jealously guarded control over key resources and his ability to confer 'Panzer priority' that was the truly decisive factor.³⁶

II

Whoever ultimately deserved the credit, the Jaegerstab formed the springboard in the summer of 1944 for yet another round of armaments propaganda in the service of one last radicalization of the war effort. Returning from his prolonged convalescence, Albert Speer pushed himself vigorously back into the limelight as the saviour of the Nazi regime. The propaganda of the armaments miracle resumed in early May 1944 with Speer's speech to dockyard workers in which he hailed their achievement in bringing into mass-production the new generation of Mark XXI U-boats. He conveniently skated over the fact that none of these vessels would set to sea until early the next year and that none of them would be ready for combat until April 1945. On 9 June, immediately following the Allied landings in Normandy, Speer rallied the forces of the Ruhr with a lecture entitled simply 'The Miracle of Armaments' (Das Wunder der Ruestung).³⁷ What is clear from the text of the speech, and his subsequent remarks to a handpicked press conference, is that Speer now felt obliged to defend the system of 'self-responsibility' that was so central to the entire mythology of his regime. The system was coming under fire, both from the ranks of industry and from inside the Ministry. Radicals such as Hans Kehrl wanted to turn

the increasingly shambolic system of Committees, Rings and emergency staffs into a permanent, streamlined structure of state direction, backed up by a concerted fiscal consolidation.³⁸ At the same time, however, Speer was facing a groundswell of opinion from business against the increasingly brutal interventions of his Ministry.³⁹ Faced with these opposing tendencies, Speer played his strongest card: his unrivalled relationship with the Fuehrer. The Speer-Hitler relationship had gone through turbulent times since October 1943, but in May 1944 Speer had resumed his intimacy with the Fuehrer. Though Hitler's health was failing badly and he was increasingly unwilling to speak in public, he agreed to make a major appearance on Speer's behalf. On 24-5 June, in Linz, under tight military security, Speer organized a conference for all the key figures in the armaments economy, 300 in all.⁴⁰ The audience were treated to a packed lecture programme. Speer's own address lasted for three hours, copiously illustrated with slides and graphs, depicting the triumphs of the Reich Armaments Ministry and the achievement of his key collaborators - Saur, Degenkolb, Schieber et al. It was a presentation designed to vindicate the embattled system of 'self-responsibility' and to demonstrate its indispensable importance to the war effort. The evenings were taken up with an uplifting programme of classical music, including Bruckner, chamber music on period instruments and an appearance by Herbert von Karajan.⁴¹ For a select group of delegates, the high point came on 26 June with a visit to the Plattenhof at Berchtesgaden, at which they were privileged to hear what was to be Hitler's last public speech, a speech that Speer effectively wrote. As his script, Speer had provided Hitler with a restatement of the message that the Armaments Ministry had been peddling for the last two months. The 'self-responsibility of industry' was the key to success. The achievements so far were miraculous. Defeatism was unjustified. But to prevail, Germany needed one last effort. If German industry failed to meet the demands of the war, the consequences would be catastrophic. Speer clearly wanted to emphasize this point in particular. No mercy was to be expected, even from the Western Allies. Speer's notes for Hitler were emphatic: 'Should the war be lost! . . . merciless extirpation of German industry, to eliminate competition in world markets. The enemy has concrete economic plans, which confirm this.'⁴² To stave off this awful prospect, virtually any sacrifice could be justified. The brutal methods of the Jaegerstab would have to be put up with. But, once victory had been achieved,

German business could look forward to a return of entrepreneurial freedom. As Speer-Hitler put it: 'When this war is decided by our victory, then the private initiative of German business will experience its greatest moment!' Hitler promised German business 'perhaps its greatest flourishing of all time'.⁴³ In the midst of ever more violent coercion, Speer persuaded Hitler to put on record his belief in 'the further development of humanity through the promotion of private initiative, in which alone I see the precondition for all real progress'.

Amidst the horror of 1944, it is hard to imagine how tired such phrases must have sounded. In his memoirs Hans Kehrl recalled the shock of seeing the deterioration in Hitler, who now appeared a sick and aged man.⁴⁴ This disillusionment, however, was far from universal. Walter Rohland, now the CEO of the Vereinigte Stahlwerke and still one of Speer's chief supporters in heavy industry, had been one of the parties most keen to have Hitler make a public statement in favour of entrepreneurial initiative. A few days after the event, Rohland wrote to Speer to congratulate him on the 'armaments conference, which went really marvellously well'.⁴⁵

If Hitler appeared distracted in Linz, he had good reason. On 6 June the British and Americans had finally made their landings in France.⁴⁶ Predictably, the smothering Allied air superiority prevented the Wehrmacht from responding quickly enough to drive the invaders back into the sea. On D-Day the entire Luftwaffe in the West managed only 275 sorties, as compared with 14,000 flown by Allied aircraft.⁴⁷ Three weeks later, the British were pulverizing Caen and the Americans were threatening to encircle tens of thousands of German troops in Brittany. This battle in the West, however, was small-scale and slow-moving by comparison with the epic drama unfolding in the East.⁴⁸ On 22 June, on the third anniversary of the German assault on the Soviet Union, the Red Army unleashed operation Bagration against the Wehrmacht's Army Group Centre.⁴⁹ Compounding the numerical and qualitative superiority of their equipment, with superior intelligence and the logistical support provided by American trucks and half-tracks, Marshals Zhukov and Vasilevsky pulled off what is widely regarded as the 'most impressive ground operation of the war'.⁵⁰ Within days of the attack three entire German armies were destroyed. By 4 July Soviet forces had liberated Minsk and were well on their way towards the Polish border. On 11 July the Wehrmacht reported that Army Group Centre had lost 28 divisions

and 300,000 men. By the end of the battle for Belorussia that figure had risen to 450,000.⁵¹ Huge columns of German prisoners paraded forlornly through the wide Moscow avenues. On 24 July the troops of Marshal Konstantin Rokossovskii's left-flank armies liberated the first major concentration camp, Majdanek near Lublin. Four days later, after an advance of almost 600 kilometres in six weeks, the Red Army was finally fought to a standstill within earshot of the Warsaw suburbs. After three years of savage fighting the Wehrmacht had been driven back to its starting line in June 1941.

Meanwhile, the Allied air forces were finally concentrating their strength against Germany's synthetic fuel plants.⁵² Verbatim minutes of meetings on 22-3 May suggest that following the first round of attacks, even Speer momentarily lost his cool.⁵³ However, the Third Reich's unstoppable Armaments Minister soon regained his momentum. The final agony of the German war effort would be the moment at which his power reached its fullest extent.⁵⁴ In June 1944, in the run-up to the Linz conference, he forced Goering to acknowledge the logical consequence of the formation of the Jaegerstab. With effect from 1 August 1944, the Luftwaffe's entire industrial complex was placed directly under the control of Speer's Super-Ministry. For the first time in the history of the Third Reich, the whole armaments effort was formally concentrated under one single authority. And this was not enough. The military emergency demanded that literally every facet of German society should be put at the service of the war effort. On 12 July Speer wrote to Hitler demanding that, alongside his expanded powers over the armaments economy, Joseph Goebbels should be placed in charge of mobilizing the home front and Heinrich Himmler should be given responsibility for the army's reserve formations. Only the ruthless determination of National Socialist leadership could see Germany through. Even at this late stage, Speer refused to concede defeat. In his report to Hitler he stressed that 'with the new, technically superior weapons, aircraft, U-boats and with the deployment of the A4 [rocket] and with the increase in production of tanks and assault guns we will in the next three to four months overcome the apex of the crisis, which, as yet, still lies ahead...'.⁵⁵ Goebbels's appointment as Reich plenipotentiary for total war followed on 18 July.⁵⁶ Himmler's promotion came two days later.⁵⁷ In the days prior to 20 July, Speer thus allied himself firmly with the two men who were to prove themselves to be the key pillars of the Nazi regime in the

desperate hours following the attempt on Hitler's life. At the moment that the bomb went off in Hitler's bunker, Speer was with Goebbels and remained with him throughout the following hours. Nor, despite the mendacious obfuscation in Speer's memoirs, can there be any doubt where his sympathies lay.⁸⁵ Four days after the failure of the coup attempt, whilst the SS were rounding up thousands of suspects, Speer hailed Himmler and Goebbels's new appointments in enthusiastic tones. Speer told his staff that these were the men to ensure that Total War was no longer a matter 'for discussion, but a fact'.⁵⁹ At the beginning of August 1944, on the occasion of the absorption of the Luftwaffe sector into his Ministry, Speer struck the same tone to the newly formed Armaments Staff, an organization modelled on the now defunct Jaegerstab. Speer spoke about the 'select' few, who were now in charge of the Reich, 'at the head of which, under our Fuehrer, stand men like Himmler and Goebbels'.⁶⁰ Given Germany's military situation, the task of the Armaments Staff was, Speer stressed, as much psychological as practical. Apart from continuing to raise armaments output, their chief mission was to spread a spirit of 'optimism and calm'. They were to hold together to the last, as a 'sworn community' born out of years of common labour in the armaments effort.⁶¹

Speer's own efforts to promote optimism reached their high point a few days later at Posen, where, as in 1943, he and Himmler addressed the Gauleiter. Speer's talk consisted of the usual concoction of impressive sounding armaments statistics, but on this occasion he went one step further. To ensure that the figures for July 1944 really were the highest on record, Speer added the prospective output for the first week of August to the July totals.⁶² Speer had succumbed to the final temptation of the 'big lie'. He was no longer simply dramatizing, heightening and manipulating reality. He was engaged in a conscious act of deception. For the coming months, Speer promised the Gauleiter further huge increases in the production of all key weapons and calibres of ammunition. The next day, Hitler affirmed Speer's central position in his post-conference address to the Gauleiter at the Fuehrer headquarters, making a special point of emphasizing the achievements of Speer's Ministry over the last year. Despite Speer's unreal optimism, however, the German war effort was past its peak. From July onwards armaments production fell. From early 1945 it plunged. Production did not decline at the same speed for all types of armaments. Weapons and tanks reached

their highest level only in the last months of 1944. Ammunition peaked in September. But aircraft production, the most complex component of the military industrial system and the industry that had been targeted most heavily by Allied bombing, collapsed precipitously from the summer of 1944 onwards.

Since this effectively marked the end of the arms race that has been one of the driving forces in our narrative since at least the late 1930s, it is worth pausing to take stock.⁶³ Predictably, in the light of what has already been said, the disparity in total output between Germany and its enemies was stark. On the back of the triumphs of the Jaegerstab, Germany in 1944 managed to produce a total of 34,100 combat aircraft. By contrast, the combined output of its major opponents - Britain, the Soviet Union and the United States - came to 127,300 of which the United States accounted for 71,400, a margin of superiority of 3.7 to 1.⁶⁴ In tanks the disparity was similarly large: 18,300 produced in Germany as opposed to 54,100 by the Allies, with the Soviet Union in this category accounting for 29,000 of the Allied total. The ratios for artillery, rifles and machine guns were somewhat less unfavourable to Germany, varying between 2.1 and 2.7 to 1 against. But 1944 was the peak year for German production, whereas in these categories the output of its enemies reached its maximum in 1943. In short, nothing that Albert Speer and his colleagues had done since 1942 had made any difference to the Wehrmacht's fundamental predicament. But though on the one hand the triumphalism that surrounds the Speer Ministry clearly needs to be taken with more than a pinch of salt, there is no reason, on the other hand, to talk in terms of failure. Once Germany had engaged both Britain and the Soviet Union and once the United States threw its weight fully into the scales, the odds against the Third Reich were bound to be overwhelming. In 1941, before the German invasion of the Soviet Union but also before the American economy hit full stride, the combined GDP of Britain, the Soviet Union and the United States exceeded that of Germany by a factor of 4.36 to 1. Similarly, in the 1930s the combined steel output of Britain, the Soviet Union and the United States had been almost exactly four times greater than that of Germany and that at a time when American industry was well short of its productive peak.⁶⁵ By 1944 the ratio of steel output, even if we add the output of Belgium, France and Poland to the German side, was 4.5 to 1 against Germany. What Germany faced by 1944 was

simply the crushing material superiority that German strategists had always feared.

Germany's conquests early in the war certainly did something to offset this disadvantage. A further mobilization of 'foreign capacity', notably in France, was one of the trump cards with which Speer sought to rally the German war effort in the autumn of 1943.⁶⁶ Between 17 and 19 September 1943 Speer and Kehrl hosted French Minister of Production Jean Bichelonne in Berlin to discuss the possibility of a major increase in the outsourcing of production to France. Given the state of the French economy, however, this was a last-ditch effort of little practical significance. Over the entire period from 1939-45, the occupied territories were undeniably important to the German war effort. Above all, they provided labour, food and raw materials. They also provided a gigantic territorial cushion without which the Wehrmacht could never have prolonged the end of the war until 1945. What they could not do, however, was to offset the overwhelming industrial advantage imparted to Germany's European enemies by the involvement of the United States. We have seen how derisory was Luftwaffe outsourcing early in the occupation of the Western territories. The situation did not improve significantly later in the war. In 1943, the last full year of occupation, the combined deliveries to Germany of military equipment from France, Belgium, the Netherlands, the General Government, Denmark, Norway and Serbia amounted to only 9.3 per cent of total armaments production.⁶⁷ Only in ship-building, communications equipment and motor vehicles did the occupied territories make a notable contribution to the combat equipment of the Wehrmacht. In absolute terms, in 1943 all deliveries to the Wehrmacht from occupied Europe came to 4.6 billion Reichsmarks.⁶⁸ By contrast, out of American munitions production in 1943 valued at \$54.4 billion (c. 150 billion Reichsmarks), Britain received deliveries valued at \$6.7 billion (c. 20 billion Reichsmarks).⁶ Even on very favourable assumptions about exchange rates, the ratio in the external supply of munitions to the two European powers cannot have been less than 4:1 against Germany. Given the desperately poor productivity in the occupied territories, the foreign labour programme was clearly by far the most important contribution that occupied Europe made to Germany's armaments effort. By 1944, one in three workers in Wehrmacht armaments production was a foreigner.⁷⁰

Table 17. Axis and Allied armaments production, 1942-1944, in relation to economic potential

	1990 PPP \$:		1941		1944		1944		1944		
	000s:	000 tons:	Major	Steel	Major	Steel	1941	1944	1941	1944	
	Rifles	Machine pistols	Machine guns	Mortars	Tanks	Combat aircraft	naval vessels	GDP	GDP	production	production
										1939	1944
United States	10,714	1,685	2,291	512	61.6	86	6,755	1,094	1,499	55,731	81,321
Britain	2,052	3,682	610	317	65.3	20.7	651	344	346	13,716	12,337
Soviet Union	9,935	5,501	1,254	380	306.5	77.5	55	359	495	18,796	16,350
Total, Allies	22,701	10,868	4,155	1,209	433.4	184.2	7,461	1,797	2,340	88,243	110,008
Germany	6,501	695	889	262	66.0	35.2	703	412	437	21,528	24,218
Italy			83	7	11.3	2.0	218	144	137	2,283	1,025
Japan	1,959	3	341	126	4.3	2.4	438	196	189	6,693	6,366
Total Axis	8,460	698	1,313	395	81.6	39.6	1,359	752	763	30,504	31,609
Allies/Axis	2.7	15.6	3.2	3.1	5.3	4.7	5.5	2.4	3.1	2.9	3.5
Allies/ Germany	3.5	15.6	4.7	4.6	6.6	5.2	10.6	4.4	5.4	4.1	4.5

Sources: *Statistisches Handbuch*, 292. M. Harrison (ed.), *The Economics of World War II* (Cambridge, 1998), 17

III

By the last years of the war, the devastating blows delivered by the Allies were rocking the German war economy to its foundations. However, to assign sole responsibility for Germany's final collapse to such 'external shocks' would again be to collude with Speer's mythic narrative. In fact, by 1944 what could no longer be obscured was that the German war economy was disintegrating from within. Barring truly drastic counter-measures, it was clear by the summer of 1944 that Germany would soon face an inflation no less severe than that which had dissolved the structure of the Wilhelmine state between 1914 and 1923. And this points to one more blind spot in the heroic narrative of the Speer Ministry. Up to the summer of 1944 it would hardly be unfair to say that the Reich Ministry had been oblivious to money as an essential instrument of macroeconomic management. As we have seen, in the interests of maximizing armaments production, Speer in 1942 had opposed the efforts of the price commissioner and Finance Ministry to cream off excess profits. The Armaments Ministry's entire system of economic management had been based on extending and perfecting a mechanism of physical controls over German industry. By 1944, however, the problem of inflation was catching up with Speer. Money could no longer be ignored, even by the most fervent advocates of direct physical control.

In July 1944 Hans Kehrl's planning office compiled a memorandum on 'Purchasing Power, Prices and War Finance', which began in dramatic terms: 'The German economy', Kehrl's office declared, 'is threatening to fall into an anarchy, against which even an extended and improved system of economic controls [Wirtschaftslenkung] will struggle in vain.'⁷¹ From top to bottom the erosion of the value of money was robbing economic actors of their incentive to comply with the demands of the regime, as well as their basic standards of economic calculation. Germany was on the slippery slope from a state-directed economy, in which private economic actors responded of their own free will to incentives provided by the central authorities, to a full-blown state economy (Staatswirtschaft), in which economic action was motivated only by 'coercion or idealism' (Zwang oder Idealismus). And as Kehrl's memo pointed out, even the 'totally planned economy of Soviet Russia'

had learned the importance of retaining a stable monetary standard as a foundation for accounting and statistical measurement.

The inflation threatening Germany was the direct result of the huge strain being placed on the economy by the war effort. As all the major combatants found, the financial consequences of the war could be managed, if the burden was not excessive and if government authority was sufficient to levy taxes and ensure the smooth functioning of rationing and price controls.⁷² In addition, borrowing from savers, on the financial markets or from banks, provided a crucial source of relief, though this of course depended on maintaining public confidence in the war effort. The inflation that threatened to destabilize the German war effort was indicative of the fact that by 1944 these crucial thresholds had been breached. Not surprisingly, the process of disintegration began on the periphery of the Nazi Empire and it was worst in the Balkans.⁷³ By the middle of 1942, the price level in Greece had already increased by more than 340 per cent.⁷⁴ In Romania, a crucial source both of grain and oil, prices had doubled by the autumn of 1942. In Bulgaria and Hungary they had increased by at least 70 per cent. There was similarly rapid inflation in France and Belgium, though they preferred not to publish official price statistics. By 1943 all of Nazi-occupied Western Europe was clearly in the grips of an inflationary wave that brought with it an increasing disorganization and collapse in production. By 1943 Greek national output was half what it had been before the war. Less cruel in its effects but more significant in economic terms was the progressive disintegration of the French economy, where output by 1943 was down by a third on its pre-war level. There was no mystery as to the cause of this monetary collapse. In the French case, German demands may have accounted by 1943 for as much as 50 per cent of national income, a burden impossible to finance either through taxation or sound long-term borrowing.⁷⁵

As we have seen, as a result of enormous military spending the German economy had been suffering from substantial excess demand at least since 1938. But until 1943 the symptoms of inflationary dysfunction were relatively well controlled. The silent system of war finance instituted in the autumn of 1939 worked well. The tax increases of 1941-2, combined with the ever greater contributions from the occupied territories, permitted the Reich Finance Ministry to finance 54 per cent of expenditure in 1942 and 44 per cent in 1943 out of revenue.⁷⁶ In

1942. tax revenues were so buoyant that the Reich was actually able to reduce its dependence on borrowing relative to 1941. Until 1943, furthermore, the flow of household savings was sufficient for at least 17 per cent of total public expenditure to be financed through safe long-term borrowing. This still left between 28 and 33 per cent of expenditure in the budget years 1941, 1942. and 1943 to be covered by short-term borrowing, but the Reichsbank was able to stow away most of this 'floating debt' in the money market. Meanwhile, officially sanctioned prices remained fixed and a strict wartime code confined legitimate barter to trades between households. Black marketeering was sanctioned outside Germany, but not within the Reich. Goebbels exploited the winter crisis of 1941-2 to launch a major publicity campaign against illegal market activity, which helped to reinforce public hostility towards profiteers. On one optimistic estimate, the black market accounted for only 2 per cent of consumption expenditure in the early years of the war.⁷⁷ Despite the disastrous setback on the Eastern Front and the huge mobilization of both domestic and foreign resources in which Speer and his colleagues engaged, the stability of the economic order was broadly preserved. Indeed, we should go further than this. Without the largely unacknowledged success of the Reich's monetary and fiscal authorities in preserving the overall economic balance until the summer of 1943, the triumphs of the Armaments Ministry would have been harder if not impossible to achieve. As Kehrl's planning office belatedly acknowledged, if inflation had been allowed to run riot, a far greater degree of coercion would have been required to mobilize resources for military production. The functioning monetary system was a crucial lubricant for the armaments miracle.

From the early summer of 1943 onwards, however, the fragile equilibrium of Germany's war finances progressively collapsed. Speer's last round of armaments mobilization made demands on the German economy that were increasingly unsustainable. In 1943, according to the best available estimates, domestically financed war expenditure accounted for 60 per cent of German net national product, a higher proportion than in any of the other combatants.⁷⁸ In 1944 mobilization further intensified. Civilian consumption and investment were compressed yet again, as Wehrmacht expenditure continued to increase. In the fifth year of the war, between September 1943 and the end of August 1944 the Wehrmacht consumed the staggering sum of 99.4 billion Reichsmarks,

more than total national income in the late 1930s. By contrast, tax revenues both from Germany and the occupied territories stagnated at the high point reached in 1942 and, even more worryingly, Germany's financial institutions were reaching the limit of their ability to absorb state debt. The Gestapo could repress overt expressions of defeatism. But they could not directly control the day-to-day financial decisions of the German population. Already in the aftermath of Stalingrad, Gestapo informants reported an ever greater willingness to resort to the black market.⁷⁹ As households came to rely ever more on such illegal sources there was a corresponding decline in their willingness to inform on them. As in World War I, the war made criminals out of ordinary, law-abiding householders. Over the course of the war, more than a hundred thousand prosecutions for breach of the war-economy regulations were brought before the courts. According to one independent estimate, the black market by the end of the war accounted for at least 10 per cent of household consumption. As cash increasingly flooded into illegal channels, the system for recycling excess purchasing power broke down. Precisely at the moment in the early summer of 1943 when Speer's armaments miracle first ground to a halt, savings deposits fell sharply for the first time since the early months of the war.⁸⁰ By the summer of 1944 a total monetary collapse was under way. The sale of long-term investment products such as life insurance had fallen off sharply already in the spring and large cash withdrawals were reported from banks across the country. The financial institutions, for their part, increasingly turned away from either long- or short-term government bonds, forcing the Reichsbank to absorb ever larger quantities of government paper into its accounts. Cash in circulation ballooned. Between September 1944 and the end of April 1945 the volume of banknotes expanded by more than 80 per cent.⁸¹ Germany now faced the imminent threat of hyperinflation. This in turn undermined the functioning of the 'real economy'. Given that there were fewer and fewer consumer goods to buy in the shops, and given the near inevitability that unspent savings would be wiped out by a post-war inflation, the money wages paid to workers became increasingly meaningless. It was this which forced the resort to material incentives such as extra rations of food, cigarettes or clothing. And it was this also which accelerated the spiral of coercive violence. As positive incentives failed, threats and police sanctions inevitably followed. Firms could have little interest in piling up profits in

bank accounts which would soon evaporate once the post-war inflation cut loose. Instead, they did everything they could to sink their funds into stocks of raw materials, new buildings, capital equipment and the shares of other companies, all of which would retain their value regardless of the dislocation of the monetary system. As far as possible, they also began to export capital from Germany, to safe havens in Sweden, Switzerland and Portugal.⁸² From the point of view of the Speer Ministry, however, this 'drive to substance' ('Drang zur Substanz') was deeply dysfunctional. It ran directly contrary to the desire of the planners to cut down on the hoarding of stocks and to prevent firms from placing orders for new plant that could not possibly make any contribution to the immediate war effort. By 1944, every Reichsmark invested in new machine tools or new buildings distracted resources away from the immediate production of armaments.⁸³

It was only, therefore, in the summer of 1944 that the Speer Ministry was finally forced to consider the wider economic consequences of its relentless production drive. Up to this point it had been happy to see both producers and workers well rewarded in financial terms for their ever greater contribution to war production. It was only when the disintegration of the monetary system began to render these microeconomic incentives ineffective that the Armaments Ministry finally began to consider the bigger picture. To remedy the situation, the planning office in the first instance called for further controls, tighter allocation of raw materials and ever more intrusive regulation of company behaviour and employment practices.⁸⁴ However, as the memorandum of July 1944 acknowledged, this endless search for perfection in the planning mechanism was doomed to frustration unless it was combined with an equally determined effort to restore the functioning of the monetary system. Kehrl's staff thus called for a sharp increase in taxes on consumer expenditure and a system of forced saving whereby armaments contractors and workers would be paid a fraction of their income, not in cash, but in the form of government bonds, which would be redeemable only after the war was over.

As we have seen, the idea of creaming off the profits earned in the armaments sector had been discussed repeatedly since the start of the war, but not until the summer of 1944 did it finally gain the backing of the managers of the armaments effort. In 1943 the Finance Ministry had proposed a set of measures that would have raised an additional

8 billion Reichsmarks per annum.⁸⁵ However, the dangers involved in any large increase in taxation were apparent from the experience in the summer of 1942, when the German banking system was swept by rumours that the Reich was about to impose a punitive tax on savings. The savings banks, a crucial link in the conveyor belt of 'silent financing', were unsettled by a series of panic withdrawals. Unsurprisingly, the proposed package of tax increases was vetoed by Hitler and the party authorities in early 1943, and the Academy for German Law, which had provided the main forum for academic discussion of the Reich's fiscal problems, shut down the relevant committee.⁸⁶ On 22 September 1944 Hitler again vetoed any further discussion of major tax increases. In February 1945, as the money supply surged out of control, the Finance Ministry made one last desperate appeal to siphon off at least 25 billion Reichsmarks.⁸⁷ As the Third Reich collapsed, a bewildered and out-of-touch Fuehrer was finally persuaded to put his signature to a tax decree. He did so, however, on the condition that the tax increases should come into force only after the end of the war.

Much could be made of this unwillingness on the part of the Third Reich to impose the full cost of the war on the Volksgenossen. It could be read as a symptom of the regime's deep-seated 'populism'. But the irony, of course, was that the decision not to tax did not imply that the real burdens of the war were not imposed on the German population. Whether or not they were directly appropriated by the state, an increasing share of the wages and social benefits paid out during the war could not be spent, or could only be spent on black-market purchases at exorbitant prices. In this sense, it would be naive to infer from the failure to impose draconian war taxes that the Third Reich was not willing to impose the full cost of the war on its citizens.⁸⁸ Whatever happened to money incomes, rationing and the restriction in the production of consumer goods, combined with the impact of British and American bombing, were severely reducing the real standard of living of the German population. Choosing not to match this real reduction with equivalent taxes on money incomes was at best ambiguous in its effects. It may have left some people feeling richer on account of the funds accumulating in savings accounts or in war bonds. But these were promises of future purchasing power that depended for their real value on the success of the Reich's authorities in maintaining the value of the Reichsmark. Meanwhile, the inflationary danger posed by this pent-up purchasing

power necessitated ever more stringent controls, which arguably had even greater political costs. When Kehrl's planning office advocated taxation in the summer of 1944, it did so not as an act of 'rigour', but as a means of avoiding the disastrous inefficiencies that would result from an inflationary collapse of the currency. Taxation, in so far as it helped to ward off inflation, would in fact have provided the best defence of the minimal version of economic freedom that the Third Reich still provided for its citizens. It might have been politically uncomfortable in the short term, but from the point of view of the regime itself, let alone the population at large, a stable monetary order was clearly preferable either to hyperinflationary anarchy or total state control.

IV

In the event, the political leadership of the Third Reich never had to face the full consequences of its own fiscal inaction. By the autumn of 1944, despite the halting advance of the British and American armies and the awful casualties still being exacted from the Red Army, the final defeat of the Wehrmacht was clearly only a matter of months away. **What was unclear in the last months of the war was whether it would be the Wehrmacht or the German war economy that collapsed first.** The losses of territory suffered from the beginning of 1944 signed the death warrant of the war economy. The evacuation of the Ukrainian ore mines in February 1944 restricted German steel production to a time-horizon of eighteen months at most.⁸⁹ The supply of oil from Romania - an absolute precondition for the continuation of large-scale mobile warfare - was cut off by April 1944. These losses put a time limit on German survival. But they did not by themselves imply immediate collapse. In a typically bullish assessment prepared for Hitler in the first week of September 1944, Speer reckoned that German stocks of raw materials were sufficient to allow production to continue, even if Germany was forced to retreat altogether from the Balkans, Western Europe, northern Italy and halfway across Hungary.⁹⁰ It was not territorial losses that paralysed the German economy but the onset of a campaign of aerial bombardment, of completely unprecedented intensity.⁹¹

In the first half of 1944 the British and American air forces had been distracted by the preparations for the invasion of Normandy. The Allies

DISINTEGRATION

left nothing to chance. To protect the beachheads from rapid German counterattack they methodically pulverized the entire French transport system. The only significant diversions from this tactical bombing were a series of devastating attacks on Germany's fuel hydrogenation plants. **Once Normandy was secured, the bombers were finally free to turn their full attention to Germany, and they did so with dreadful intensity.** It had taken four long and painful years since the fateful decisions in the summer of 1940 to construct the Anglo-American air weapon. But the war-winning airfleet was now ready. In March 1943, at the start of the strategic bombing campaign, the British and Americans had disposed of 1,000 aircraft with a combined bomb-lifting capacity of 4,000 tons.⁹² By February 1944, in time for the all-out offensive of Big Week, the combined force had swollen to 3,000 bombers and was increasing rapidly to reach 5,250 by July 1944, the level at which it stabilized for the rest of the war. Five times as many aircraft as in 1943 were now capable of delivering a staggering 20,000 tons of bombs in a single lift. And from June 1944 onwards this fearful weapon was turned relentlessly against the Reich. Between June and October 1944 the British and Americans rained down on Germany no less than half a million tons of bombs, more than in the entire war up to that point. Over the next six months they dropped a further 545,000 tons. Berlin and the Ruhr were visited with raids of unprecedented intensity. The 8th US Army Air Force hit Berlin on 3 February 1945 with a force of 1,000 heavy bombers, a raid which claimed 2,893 lives. But it was not just the big cities that were now being targeted. Dozens of smaller towns were laid waste by fire and explosives: Darmstadt on 12 September 1944 (8,400 dead), Freiburg on 27/28 November (2,000 dead), Heilbronn on 4 December (7,000 dead), Nuremberg on 2 January 1945 (1,790 dead) and again on 20 and 21 February, Magdeburg on 16 January 1945 (4,000 dead), Dresden on 13/14 February (35,000 dead), Wuerzburg on 16/17 February (5,000 dead), Pforzheim on 23/24 February (17,000 dead) and Swindemuende on 12 March (5,000 dead). The RAF's last major night-time raid was against Potsdam on 14/15 April 1945, a sortie by 500 bombers which killed at least 3,500 people and incinerated the historical records of the Prussian army.⁹³

In a general sense, this destruction clearly contributed to the dislocation of the German home front. It also clearly satisfied a heartfelt desire for revenge. The heaviest month of bombing in the entire war was

THE WAGES OF DESTRUCTION

March 1945, with a total payload of 133,329 tons, at a time when such raids could have no conceivable impact, even in accelerating the end of the fighting. Not that the devastating bombardment did not have serious economic effects. Factories were obliterated, burned out, buried in mountains of rubble, or paralysed for lack of raw materials and power. But the correlation between the area bombing of Germany's cities and the collapse of its war production was loose, at best. There was probably no single plant to which the Allies devoted more attention than Krupp's Gusstahlfabrik in Essen, the ultimate symbol of German industrial militarism.⁹⁴ By the end of the war, the Gusstahlfabrik had been targeted no less than twenty-five times. In 1943 it was repeatedly bombed as part of the 'Battle of the Ruhr'. But steel production was not definitively ended until 2.3-5 October 1944, when Essen was attacked by a total of 1,200 planes. They ended the Gusstahlfabrik's contribution to the German war effort by destroying its electrical power supply. The heaviest attack of all, however, came on 3 March 1945, by which time the bombers were doing little more than ploughing a field of rubble. The wanton destruction of German cities could disrupt production, but it could not bring it to a complete standstill. The way in which the bombers achieved that effect was by severing the rail links and waterways between the Ruhr and the rest of Germany.

The disaster began at the end of September with an attack by RAF Bomber Command which drained the Dortmund-Ems canal.⁹⁵ The giant marshalling yard at Hamm was hit repeatedly in September and October, reducing its capacity by 75 per cent. The Rhine was blocked on 14 October by the destruction of the Cologne-Muelheim bridge. Between 14 and 18 October rail shipments of coal from the Ruhr were halted completely, and the disruption in the reverse direction was even more severe. In early October only one of fifty ore trains was making it into the Ruhr. For lack of iron ore, steel production in the Ruhr by January 1945 was down by 66 per cent relative to the previous year. Though Allied bombing strategy actually shifted in November and December away from the absolute prioritization of transport targets, the sheer weight of tonnage dropped was sufficient to bring about near total collapse. Between November 1944 and January 1945 the British and American air forces delivered no less than 102,796 tons against transport targets, mainly railway marshalling yards. On 11 November Speer reported to Hitler that the Ruhr was effectively sealed off from

the rest of the Reich.⁹⁶ The shortfall in hard coal deliveries from the Ruhr between August 1944 and January 1945 was a massive 36.5 million tons, at least six weeks of normal consumption. In December 1944 Germany faced the first of three consecutive winters without adequate supplies of coal. Not until 1948 were reliable connections restored between the Ruhr mines and the urban centres of Germany. For a mid-twentieth-century European society this spelled imminent paralysis. Already in January 1945 the impact of the coal famine was making itself severely felt. Upstream from the Ruhr in the southern industrial hub of Mannheim-Ludwigshafen, coal shortages accounted for an 80 per cent fall in production at Brown, Boveri and Cie, one of the Reich's principal producers of electrical transformers. Opel in Ruesselsheim and BMW in Munich were both closed in early 1945 for lack of coal. By the spring contemporaries were noting that the Rhine was running clean for the first time in generations. There were no factories left in operation to pollute it.⁹⁷

At this point, the Armaments Ministry was defeated. The bombers were unstoppable. The collapse of industrial production in Germany was only a matter of time. But in the autumn of 1944 the war went through the last of the periods of stagnation, which were so essential to the ability of Hitler's regime to rally itself and to convince itself time and time again that all was not lost. In September 1944 the Allied advance across France came to a halt on the borders of the Reich. There followed months of grinding defensive battles, in which progress was agonizingly slow and the superior fighting skill of the Wehrmacht showed itself to remarkable effect. In the East, the Red Army halted outside Warsaw. For the following months, fighting on the Eastern Front was largely confined to the flanks. German Army Group North was cut off and trapped against the Baltic coastline. In the South, after the Red Army took Romania on the run, its progress through Hungary was far less swift. At the end of November the Wehrmacht still clung to Budapest. A year of unmitigated military disaster thus ended, as Alfred Jodl had predicted, with the frontiers of the Reich intact. And on 16 December, Speer's mobilization of the tank industry permitted Hitler to indulge in the last great surprise of the war: the Ardennes offensive.⁹⁸ In an absurd attempt to repeat the success of May 1940, 1,800 tanks, each fuelled with one load of petrol, plunged through the Belgian hills towards the Meuse and the gigantic Allied petrol dumps at Antwerp.⁹⁹

On Christmas Eve 1944 they reached the river crossings at Dinant that had marked the turning point four years earlier. This time, however, they penetrated no further. Though outnumbered, the American units caught in the initial assault fought a dogged rearguard action, giving Eisenhower time to respond. As soon as the winter clouds lifted, Allied air superiority reimposed itself and reinforcements were rushed in. It was, as Patton put it, 'a clear cold Christmas, lovely weather for killing Germans'.¹⁰⁰ In practice, however, it took the Allies until the end of January 1945 to reverse the gains made by the Wehrmacht's last futile offensive. At Fuehrer headquarters, spirits were still not broken.¹⁰¹ Speer reassured Goebbels that, despite the loss of all the occupied territories, armaments production could continue for at least another year. The loss of Upper Silesia to the Red Army at the end of January 1945, the first major zone of German industry to fall to the enemy, forced Speer to revise this estimate. But he was determined, as he put it to Goebbels, to 'do what could be done'. Indeed, he requested from Hitler one final expansion of his administrative powers, taking control of the entire transport system of the Reich, so as to ensure that the priority of the military and the armaments industries were defended against the clamour of terror-stricken civilians fleeing the Red Army.

In early March, Speer made a final visit to the Ruhr to inspect the work being done by his most important collaborators in German industry, Albert Voegler and Walter Rohland, who now headed an emergency staff charged with sustaining armaments production in the Ruhr.¹⁰² Under the impression of that visit, Speer wrote a report, which he forwarded to Hitler on 15 March. In this memorandum, Speer famously argued that, rather than engage in a wholesale policy of scorched earth, the Wehrmacht should take measures to paralyse German industry in the West rather than destroying it permanently. This at least would provide the German population with the minimal means for survival. What has recently emerged from the archives is a second memorandum, which Speer submitted to Hitler three days later, in which he advocated a completely different strategy for the territories still under German control. Speer may have opposed the wanton destruction of industry in the West. But on 15 March the Wehrmacht was still holding defensible positions on the eastern banks of the Rhine. At the same time, the Red Army was halted on the Weichsel. This inner zone of Germany, between the Rhine and the Weichsel, Speer proposed to defend to the last man.

This was not an economically viable unit and Speer accepted that 'economic collapse' was now inevitable. But he still believed that armaments production could be continued for a period of eight weeks. Every available soldier was to be massed along the river banks for one last slaughter. Even now, Speer did not relinquish the hope that Germany had some power to influence the outcome of the war. 'A dogged defence of the current front line for a few weeks', he wrote, 'may yet demand respect from the enemy and may yet be able to influence the end of the war in a positive direction.'

Nobody should underestimate the consequences of this kind of thinking on the part of the political leadership of the Third Reich. World War II in Europe did not end with a whimper. The final battles of the war were the most bloody in the entire conflict. Setting aside the casualties suffered by the Soviets, the Americans, the British and their Commonwealth allies, the losses suffered by the Wehrmacht were horrendous enough. The defeats of 1944 had cost the Germans 1.8 million men killed.¹⁰³ In the first five months of 1945, whilst Speer was encouraging his Fuehrer to one last show of resistance, 1.4 million German soldiers met their deaths, 450,000 in January alone. Nor does this include the tens of thousands of civilians who fell victim to Allied bombing. To describe the destruction of Germany in 1945 in the language of the Holocaust is both obscene and inaccurate.¹⁰⁴ This was a war, not a massacre of the innocents. It may have felt like slaughter to those on the receiving end, but this was an effect of the means used, not the ends intended. The Western Allies broke no law of war that had not been breached by the Wehrmacht a hundred times over. The Red Army behaved barbarically in the territories it occupied, but the Soviets did not perpetrate a genocide. Nazi Germany had challenged three of the greatest industrial powers on earth. It had taken them five long years to bring their industrial might fully to bear. But now their war machines were fully assembled and in the first five months of 1945 they cut their way into the territory of Germany with truly horrendous effects. The Allies waged war with a volume of firepower unlike that ever used in any previous conflict. The results were nightmarish and would have been even worse but for the fact that the policy of 'Germany first' meant that the Nazi regime was destroyed before the atomic bomb was ready for use.

Less than a week after Speer wrote his counsel of sacrificial destruction, the flimsy German defences on the Rhine were breached. The

Armaments Minister returned to Berlin for a last business meeting with Hitler on 29/30 March.¹⁰⁵ There is no authentic record of this encounter, only the mocking commentary of Goebbels's diary and Speer's unreliable memoirs. It seems that Hitler extracted from Speer the promise that he would do everything 'to raise resistance to its utmost limit'. And Speer was not able to persuade Hitler to withdraw his order to scorch the earth ahead of the invaders. Goebbels reported simply Speer has 'given in'. Both Speer and Hitler chose to preserve their relationship until the very end. Speer objected to Hitler's Nero order, but not to his face. It was only after his final conference with the Fuehrer that Speer issued detailed instructions for the execution of the evacuation order, effectively countermanding Hitler's intention. Local authorities were permitted to paralyse German industrial facilities and render bridges unusable without blowing them up. It was action at the local level that now mattered. As the German state disintegrated, so did the national economy. Regions, firms and individuals were reduced to desperate strategies of survival. In the Ruhr, Albert Voegler and Walter Rohland argued inconclusively with the local military commanders about the demolition of one of the most important bridges across the Ruhr. They agreed that though the bridge should be made impassable, power, water and gas lines would be left intact. In the end, what had survived the bombing was saved by the arrival of the American forces. Back at headquarters in the capital, Herbert Backe, who had once planned the food supply for all of Europe, was now principally concerned with filling the granaries of Berlin, in the hope that urban life could be sustained at least until the next harvest was brought in. Hans Kehrl continued to work feverishly at plans.¹⁰⁶ He collaborated with Backe on an emergency production programme for agricultural equipment, on the assumption that farming and food would be Germany's chief preoccupations in the years to come. He also prepared a programme to ensure a minimal supply of clothing to the German population after the collapse. By this point, however, the personal safety of his family was an unavoidable issue. With the help of Hellmuth Roehnert, the CEO of Rheinmetall, Kehrl dispatched his wife and young daughter westwards to the testing grounds in the Lueneburger Heide, safely out of reach of the vengeful Red Army. Large parts of Kehrl's former office, the Ministry of Economic Affairs, were dispatched to the Thuringian countryside in a double-decker bus, stuffed with papers, cash and gold. Meanwhile, Rolf Wagenfuehr, the chief statis-

DISINTEGRATION

tician in Speer's Ministries, busied himself with an impressive collection of statistics, which to this day provide us with the most influential account of the German war effort.¹⁰⁷ No veil of silence was to be drawn over the armaments miracle. As the ghastly reality of the Nazi war economy was finally being liquidated, the writing of its history had already begun.

The End

The jaws of defeat finally closed on the Third Reich in the last week of April 1945. Just before midday on 25 April advanced patrols of the US 1st Army's 69th infantry division and the Soviet 1st Ukrainian Army linked up on the banks of the Elbe at the small Saxon town of Strehla amidst the gruesome wreckage of a German refugee trek. The banks of the river, where Lieutenant Albert Kotzebue's GIs embraced their Soviet counterparts, were littered with the dismembered corpses of dozens of old men, women and children. Three days earlier they had fallen victim to retreating Wehrmacht soldiers, who had been so desperate to escape capture by the Red Army that they had blown up the makeshift pontoon bridge whilst hundreds of civilians were still streaming across it. As many as four hundred may have drowned or been blown to pieces by the twin detonations.

Not surprisingly, the official occasion for the world-defining Soviet-American encounter was shifted 45 kilometres downstream to the town of Torgau, where contact was made later the same afternoon. The official photograph on Torgau's broken-backed bridge was staged the following day. Contrived though it may have been, the handshake was highly significant. Along the course of the Elbe, Torgau lay midway between the burned-out baroque splendour of Dresden and the cradle of Lutheran Europe at Wittenberg. A few miles further to the north was Dessau, home not only to the Junkers bomber factories but also to the seminal early twentieth-century modernism of the Bauhaus. In Germany there was no more symbolic terrain on which to enact the epochal shift in the global balance of power from old Europe to the new powers of the United States and the Soviet Union.

From an economic point of view, Torgau was the logical outcome or two truly dramatic developments that defined the early twentieth cen-

ture. The first and most obvious was the emergence of the United States as the dominant force in the world economy. The second, which did not become apparent until the 1930s, was the astonishing transformation of the Russian Empire wrought by the Bolshevik dictatorship. As the linking up of American and Soviet infantrymen deep in the heart of Central Europe confirmed, the history of the Continent in the first half of the twentieth century, the history of Germany and the history of Hitler's regime cannot be understood but in relation to these twin developments in the United States and the Soviet Union. Certainly, this is the backdrop against which this particular account of the rise and fall of the Nazi economy has been set.

Hitler never ceased to hark back to the revolutions that swept Europe in 1917-18. Anti-Communism was an unwavering element in his politics, tightly interwoven with a particularly toxic form of conspiratorial anti-Semitism. But anti-Communism was generic on the German right, as were projects of Eastern expansionism. Furthermore, though the Soviet Union remained a looming presence in European affairs, it turned inwards from the late 1920s onwards and in the 1930s tended to be belittled as a factor in European power politics. To identify the peculiarity and motivating dynamic of Hitler's regime, it therefore seemed more illuminating in the early chapters of this book to focus on the relations between the Third Reich and the Western powers.

The rise of the United States confronted Germany, as it did Britain and France, with a choice. With Stresemann as Foreign Minister, the Weimar Republic responded with remarkable flexibility and realism to the new situation. As we have shown, the Weimar Republic premised its entire security strategy on the economic power of the United States, both as a guarantor of its security and as a lever through which to pressure Britain and France into revision of the Treaty of Versailles. And as we have seen, this strategic choice continued to define the policy of the last respectable government of the Weimar Republic up to the summer of 1932. Not until the final spasm of the Great Depression in 1932-3 and the collapse of American hegemony in Europe was the path really open for Hitler's brand of aggressively unilateralist nationalism.

In one of his final conversations with Martin Bormann, in February 1945, Hitler remarked: 'An unfortunate historical accident fated it that my seizure of power should coincide with the moment at which the chosen one of world Jewry, Roosevelt, should have taken the helm in

the White House . . . Everything is ruined by the Jew, who has settled upon the United States as his most powerful bastion.¹ What weighed on Hitler's mind, in the last months of the war, was the pivotal role played by Roosevelt in frustrating his project of Continental conquest. In 1933, however, the role of the United States was the reverse. As Hitler came to power and Roosevelt took office, the American economy was racked by a last, devastating banking crisis. Washington's decision to unfasten the dollar from gold, taken without regard to its international ramifications, destroyed what little chance there was of assembling a combined international front to contain Hitler's regime before it had consolidated its grip on Germany. The coincidence of Hitler's seizure of power with America's temporary retreat from global affairs - a retreat that left Europe orphaned as it had not been since World War I - was of incalculable importance.

Though he disagreed profoundly with Stresemann's strategy in relation to the United States, Hitler was by no means oblivious to the changed world of the 1920s. In his 'Second Book', written in 1928, Hitler posed the central strategic questions with startling clarity: how was Germany, as a European state, to react to the 'threatened global hegemony of North America'? How could it forestall America's seemingly inevitable economic and military dominance? How was Germany's political leadership to respond to the material aspirations awakened in its population by the example of American affluence? These are undeniably modern questions. Indeed, they are with us still. Hitler's answers, however, were explosive. The solution was not to ally Germany with the United States, or to adopt American modes of life and production. Any such attempt at 'Americanization' was bound to end in frustration and disaster. Behind America, after all, stood the malevolent force of world Jewry, cloaked in the garb of liberalism, capitalism and democracy. The only adequate response to the American challenge was to create a Lebensraum for the German people sufficient to match that provided by the continent of the United States. Space on this scale was only available in the East and it could be attained only through conquest. There seems no reason to doubt that this mission of conquest was the sustaining ambition of Hitler's regime. For Hitler, a war of conquest was not one policy option amongst others. Either the German race struggled for Lebensraum or its racial enemies would condemn it to extinction.

Mounting such a challenge required a diplomatic strategy and a major military effort, both of which were ultimately founded on economics. The enormous effort of national mobilization must be the central focus of any account of the economic history of Hitler's regime. By comparison with the military-industrial complex, the various civilian work creation measures set in motion between June and December 1933, the domestic social policy initiatives and abortive projects of mass-consumption that followed, were nothing more than interim measures, which could attain their real significance only after a successful campaign of conquest. In any case, it would be a mistake to assume that the remilitarization of German society was something imposed from the top down, with the majority of Germans preferring butter to guns. For many millions, the reconstruction of the Wehrmacht was clearly the most successful aspect of the regime's domestic policy and the collective mass-consumption of weaponry was a more than sufficient substitute for private affluence.

As should be evident from the first half of this book, rearmament was the overriding and determining force impelling economic policy from the earliest stage. Everything else was sacrificed to it. In the six years between January 1933 and the autumn of the Munich crisis, Hitler's regime raised the share of national output going to the military from less than 1 to almost 20 per cent. Never before had national production been redistributed on this scale or with such speed by a capitalist state in peacetime. This extraordinary effort at redistribution was certainly eased by the simultaneous growth in German output. Putting to work 6 million unemployed provided for the needs of the Wehrmacht, whilst allowing consumption and civilian investment to be increased as well. But it is easy to forget, given its wealth today, that Germany in the 1930s was a generation away from affluence and that the majority of the population subsisted on a very modest standard of living. Rearmament came at a serious cost and this was made even more pressing by the often crippling constraints imposed by Germany's balance of payments. Already in 1934 the interests of both consumer goods industries and farmers were being sacrificed to rearmament. From 1935 in many German cities, butter and meat were surreptitiously rationed. From 1938 onwards, with military spending reaching wartime levels, the trade-off between consumption and armaments became truly severe. That Hitler's regime was able to impose this redistribution of resources betokens not inefficiency and disorganization, but a system that was

highly effective in pursuit of its central objectives. Furthermore, it should lead us to question any interpretation of Hitler's regime based on the assumption that it lacked solid internal foundations. To reiterate, the Third Reich shifted more resources in peacetime into military uses than any other capitalist regime in history. And this advantage in terms of domestic resource mobilization continued to hold throughout the ensuing world war.

So far-reaching were the regime's interventions in the German economy - starting with exchange controls and ending with the rationing of all key raw materials and the forced conscription of civilian workers in peacetime - that one is tempted to make comparisons with Stalin's Soviet Union. Such a comparison is certainly suggestive in pointing to the kind of synthesis between militarization and domestic social and economic restructuring that might have been necessary to fulfil Hitler's ambitions. Since the emergence of the United States as a world power in the early twentieth century, only Soviet-style militarism has been able to mount a credible and sustained challenge to its hegemony. And judged against Stalin's regime, one might indeed describe Hitler's state as a 'weak dictatorship'. As we have seen, this was the conclusion reached by well-informed observers such as General Franz Haider in the autumn of Barbarossa's failure in 1941. Most notably, in comparison with the Soviet Union, the Third Reich shrank from a dramatic rationalization of the most backward sectors of its society, peasant agriculture and the craft sector, a measure which might have 'freed' millions of additional workers. But given what we now know about the Generalplan Ost and the comprehensive agrarian restructuring that it was supposed to initiate, it seems that this was a matter of timing. The comprehensive restructuring of German society was simply postponed until after the conquest of Lebensraum in the East. If one must therefore concede that the Nazi party, unlike the cadres of Soviet Communism, was not a battle-hardened weapon of class war, by Western European standards it can hardly be faulted for its lack of redistributive energy. Never before, in peacetime, had a sophisticated capitalist economy been redirected so purposefully.

Setting aside the Stalinist counterfactual, one might equally well ask the opposite question. How was the Third Reich able to push its control over the German economy as far as it did? Why did Germany's business lobby tolerate this dramatic intrusion of state power after 1933? Only

a decade earlier, 'big business' had after all played an important part in frustrating the reforming ambitions of the early Weimar Republic. The answer given here consists basically of four elements. First and foremost, one must emphasize the damage done to the independent power of the business lobby by the Great Depression. Even if they had been predisposed to do so, Germany's big businessmen were in no position to put up a serious fight in 1933. Secondly, though the Nazi autarchic turn was certainly at odds with the international agenda of the German business lobby, the domestic authoritarianism of Hitler's coalition was much to their liking, as were the healthy profits that rolled in from the mid-1930s. Thirdly, though there clearly was a dramatic assertion of state power over business after 1933, naked coercion was applied only selectively and in many spheres the regime was only too willing to harness the independent initiative of businessmen, managers and technicians. Finally, given the highly uneven structure of ownership and organization in the German economy and the lack of unity between competing capitalist interests, a series of well-chosen tactical alliances were all that was needed to push vital parts of industry and commerce in the direction desired by the regime.

Once we bear in mind the constraints under which it operated it is, therefore, hard to escape the conclusion that the Third Reich was an extremely effective mobilizing regime. Furthermore, it is clear that this mobilization was from the outset directed towards the resurrection of Germany as a military power and in some general sense towards the achievement of Hitler's goals of conquest. But if one asks whether this economic mobilization was part of a coherent strategic synthesis, if one asks whether diplomacy, military planning and economic mobilization were united after 1933 in a coherent war plan, the answer delivered by this book is negative. In this respect we still struggle to unpick the effect of hindsight. We know, after all, that up to the frustration of Barbarossa in the autumn of 1941, Hitler's armies carried all before them. It seems hard to imagine that this remarkable military preponderance was not the result of long-term preparation. But the vertiginous conclusion suggested by recent military history is that this was indeed the case. Germany started the war in September 1939 with no substantial material or technical superiority over the better-established military powers of the West. It was only the fatal interlocking of Allied and German operational planning that led to the defeat of France in a few short weeks in May

and June 1940. And it was this in turn that unleashed the Wehrmacht for its rampage through Southern and Eastern Europe in 1941, which was finally and predictably brought to a halt by the enormous expanse of the Soviet Union and the dogged though ill-directed resistance of the Red Army. The central chapters of this book are devoted to unlocking the puzzles that are implied by these compelling findings of battlefield historians. If the huge rearmament drive of the 1930s and the annexation of Austria and Czechoslovakia were not enough to give Germany a substantial material advantage over its enemies, if their immediate effect was to drive Britain and France into abandoning their pacificism in favour of an aggressive strategy of containment and to force both Washington and Moscow to reconsider their positions in Europe, why did Hitler go to war in September 1939?

Faced with this question, some historians choose to argue that Hitler simply miscalculated. He did not intend to precipitate a general European war, they insist. After his experience at Munich in 1938 he expected Britain and France to stand aside in Eastern Europe. It was not Hitler, but the Western powers who chose to turn Poland into a *casus belli*. That argumentative option is rejected here since it does not accord with the diplomatic evidence of the last days leading up to the war. In August 1939, as in September 1938, Hitler was confronted with the near certainty that Britain and France would declare war. On the former occasion he had pulled back. In 1939 he chose not to. Why he plunged forward rather than pulling back is explained in this book through a novel synthesis of three distinct elements.

The first point to emphasize is that Hitler knew by the summer of 1939 that his effort to develop a long-term programme of preparation for a war with the Western powers had failed. This, indeed, is one of the key findings of this book. Though, in 1938, Hitler's regime did attempt to respond to the growing resistance of the Western powers by embarking on a gigantic programme for 'full spectrum' rearmament and though Hitler and Ribbentrop did attempt to create a global alliance with the reach to match the emerging Western coalition, this attempt was frustrated. By the summer of 1939, German efforts to unite Italy and Japan into a triple threat against the British had manifestly failed. Furthermore, as this book shows for the first time in full detail, the German armaments economy in the summer of 1939 was being seriously squeezed by the persistent problems of the balance of payments. This is not to say that

the Third Reich was facing an economic crisis. The combination of controls put in place in the course of the 1930s was undeniably effective in preventing the recurrence of a general crisis of the kind that had come close to destabilizing Hitler's regime in 1934. But in 1939 the precarious situation of the German balance of payments permitted no further acceleration of the armaments effort. Since Britain, France, the United States and the Soviet Union were all accelerating their rearmament at precisely this moment, Hitler found himself facing a sharp deterioration in the balance of forces at a date far earlier than he had expected.

Adding to the pressure for immediate action was the dramatic shift in the global diplomatic constellation. Through his breakneck aggression in 1938 and early 1939 Hitler had dismantled the French security cordon in Central Europe that had hinged on Czechoslovakia. However, after the occupation of Prague in the spring of 1939 the diplomatic fronts were hardened by the British and French guarantees to Poland and Romania. Everything now depended on the behaviour of the two flanking powers, the United States and the Soviet Union. In the summer of 1939 Stalin's decision to opt for a strategy based on fomenting inter-capitalist war tilted the balance in favour of Germany. The Nazi-Soviet pact guaranteed Germany against a second front in the East, and protected it against the worst effects of the much feared Anglo-French blockade. One can therefore construct a compelling economic-strategic rationale for Hitler's decision to go to war in September 1939. Given Germany's deteriorating economic position and the unexpectedly favourable shift in the diplomatic balance, Hitler had nothing further to gain by waiting. And as we have seen, Hitler spelled out this logic in virtually these words to anyone who would listen after September 1939.

But to confine ourselves to these rational elements of strategy would be to miss the crucial third ingredient in Hitler's decision-making process. To argue in terms of a strategic window of opportunity begs the question of why Hitler believed that war with the Western powers was inevitable. Why did he feel compelled to seize the opportunity, to gamble the future of his entire regime on a war with Britain and France, at a moment when Germany enjoyed, at most, only a slender military advantage? To explain this decision we must invoke ideology. This might seem paradoxical in light of the fact that Hitler was departing so flagrantly from the programme outlined in *Mein Kampf*. In that book, dictated in a prison cell in Landsberg fifteen years earlier, Hitler had

called for an Anglo-German alliance against the Judaeo-Bolshevik threat. In 1939 he went to war with fronts reversed: in alliance with Stalin against Britain. This, however, is simplistic. The key to Hitler's ideology was not a particular diplomatic schema, but his obsessive fixation on racial struggle and in particular the antagonism between Aryans and Jews. In the Four Year Plan memorandum of 1936, the emphasis had still been on the Judaeo-Bolshevik conspiracy. Two years later, as foreign policy and armaments policy were directed ever more clearly against the West, there is a striking parallel in the shifting focus of the regime's anti-Semitic rhetoric. From 1938 onwards, in Hitler's public utterances, the Jewish question in its wider sense was emphatically a Western and above all an American question. As was shown in Chapters 8 and 9, from the Evian conference onwards and with ever greater intensity after Kristallnacht, President Roosevelt was identified as the chief agent of a worldwide Jewish conspiracy bent on the destruction of National Socialist Germany. It was no coincidence that Hitler's famous threat of annihilation of 30 January 1939 came as a direct response to Roosevelt's State of the Union address. The United States, as everyone understood, was the key to deciding the balance of the arms race. If Britain and France could count firmly on American aid, their position would be well nigh unassailable. But the position of the United States was precariously balanced. Whilst Roosevelt led the rhetorical assault against Hitler and encouraged Britain, France and Poland in their resistance to Nazi expansionism, isolationist currents in the United States were still strong. Hitler and the rest of the Nazi leadership could not help but interpret this complex situation through the dark haze of Manichaeism anti-Semitism. For them, it was obvious that it was Jewish elements in Washington, London and Paris, bent implacably on the destruction of Nazi Germany, that were tightening the international encirclement. And it was this paranoid sense of menace that precipitated Hitler's decision to launch his strike against Poland and then against the Western coalition that continued to stand obstinately in his way.

It is perhaps not surprising that this factor was not emphasized in the speeches that Hitler made to the military leadership between May and August 1939 - certainly not in the notes taken by the military men who attended. But after the fact Hitler made no secret of its importance. Most emphatically in their conversations with the Italian leadership in the spring of 1940, both Hitler and Ribbentrop stressed the role of

THE END

world Jewry in forcing the pace of events in 1939. And what is more, this peculiar combination of strategic and economic factors, overarched by Hitler's abiding anti-Semitic obsession, is capable not only of accounting for Hitler's decision to go to war. It can also make sense of his subsequent willingness to escalate the conflict to an ever larger scale. The decision to risk a general European war over Poland, the decision in the summer of 1940, after having defeated France but not having defeated Britain, to begin immediate preparations for an attack on the Soviet Union and finally in November-December 1941 the decision to support Japan in its aggression against the United States, all followed the same pattern. Faced with the coalition of enemies that had first shown itself in 1938, orchestrated, as Hitler believed, by the 'chosen one of world Jewry', he knew that time was not on his side. The combined economic might of the Western powers, added after June 1941 to that of the Soviet Union, was overwhelming. If he was ever to secure the Lebensraum that Germany needed for true strategic freedom, Hitler needed to strike hard and fast.

In relation to the early years of World War II, there are four points of novelty to emphasize as conclusions of this book.

The anti-Western turn in Nazi anti-Semitism, which we have identified as an important theme of 1938-9, continued unabated throughout 1940 and 1941. Having precipitated the war by backing Britain and France in their guarantee for Poland, Roosevelt was now prolonging the war by backing Churchill in his refusal to surrender, a constellation which in Berlin could be explained only by reference to the malevolent role of Jews in both Washington and London. This in turn implies that as far as motivation is concerned any hard and fast distinction between the wars in the West and the East must be softened if not abandoned altogether. Though in their modes of execution the wars were drastically different, to think of them as motivated in fundamentally different ways is mistaken. The war in the West against Churchill and Roosevelt was no less an ideological war than the war for Lebensraum in the East. And though the primary motivation for invading the Soviet Union in 1941, as opposed to a later date, was to force the pace of events in the West, by driving Britain into submission before America could intervene, this too must be seen as part of the larger war against world Jewry. To counterpose this 'strategic rationale' to Hitler's long-held ideological vision of a war of conquest in the East is to pose a false alternative.

Since 1938 Hitler had seen himself as locked in a global confrontation with world Jewry. Linking the campaign in the East to the war in the West, therefore, in no way diminishes its ideological content.

Having cleared aside that possible source of misunderstanding, the second point to make is that there was a compelling economic case for Hitler's decision to widen the war in 1941. The astonishing defeat of France in the early summer of 1940 had promised to change everything. But in fact the Wehrmacht's spectacular victory did not resolve Hitler's fundamental strategic dilemma. The German navy and air force were too weak to force Britain to the negotiating table. The competitive logic of the arms race continued to apply in 1940 and 1941. Rather than surrender to Hitler's will, Britain proved willing to go to the point of national bankruptcy before being rescued by lend-lease. And thanks to its comparatively abundant foreign reserves and American assistance it could mobilize a far larger percentage of foreign resources than Germany at this critical point in the war. In Berlin, by contrast, once the euphoria of victory had worn off, a considerable disillusionment set in over the economic viability of Germany's new Grossraum. Conquering most of Western Europe added a drastic shortage of oil, nagging difficulties in coal supply and a serious shortage of animal feed to Germany's already severe deficiencies. The populations of Western Europe were a vital asset, as was their industrial capacity, but, given the constraints imposed by the British blockade, it was far from clear that these resources could be effectively mobilized. Unless Germany could secure access to the grain surpluses and oil of the Soviet Union, and organize a sustained increase in coal production, continental Europe was threatened with a prolonged decline in output, productivity and living standards. Added to which, Roosevelt had launched his own spectacular rearmament programme within days of Germany's breakthrough at Sedan. The strategic pressure on Hitler to pre-empt decisive American intervention in the war can only really be appreciated if we do full justice to the scale of the Anglo-American effort from as early as the summer of 1940. In this respect, the truly vast discrepancy between Anglo-American aircraft procurement and Germany's relatively insignificant outsourcing to France and the Netherlands is very telling. It was an imbalance that was not lost on Goering and the German Air Ministry.

Giving due weight to the trans-Atlantic arms race in German calculations in 1940-41 also helps us to explain another conundrum which

THE END

has continued to preoccupy students of the Nazi regime and which seriously influences the way in which we write its history. Contrary to the claims of some authors, the Ostheer of 1941 was considerably more powerful than that which invaded France. But it is equally undeniable that it was a force carefully calibrated on the assumption that the Red Army could be destroyed in a short campaign. German planning provided for no margin of error. Even on a charitable reading, therefore, the Barbarossa campaign was surrounded by enormous risks. It appears irrational and foolhardy when this evidence of minimal mobilization is combined with the most widely cited industrial statistics, which appear to show stagnation in armaments output and a catastrophic collapse in labour productivity between 1940 and 1941. In the light of this data, it would seem that complacency and inefficiency following the victory over France, combined with racist condescension towards the Soviets, prevented the Wehrmacht from maximizing its chances in what was clearly the decisive campaign of the war. If this were true, this moment of 'failure' should clearly stand at the centre of our entire interpretation of Hitler's regime. However, once we consider the wider strategic situation and combine this with critical scrutiny of the economic evidence, a very different picture emerges. The idea that armaments production in Germany lagged in 1940-41 and that there was a dramatic collapse in productivity is in large part a statistical illusion. Furthermore, a narrow focus on armaments production ignores what was one of the most distinctive features of the early German war effort, a huge wave of investment that continued almost uninterrupted between 1939 and 1942. When we give this its due weight, we realize something crucial. Thanks to America's backing for Britain, Germany continued to be locked into the logic of the trans-Atlantic arms race, even whilst it was girding itself for Barbarossa. Germany's industrial resources could never be fully concentrated on the Soviet Union, because at the same time enormous preparations needed to be set in train for the coming air war with Britain and America. It was after the stupendous German military victories in France, therefore, that Hitler adopted what can justifiably be described as a Blitzkrieg strategy, a coordinated strategy in which both armament production and strategic planning were premised on the assumption of swift and decisive battlefield victory over the Red Army. Its purpose, however, was not to cushion the civilian population. Its purpose was to allow Germany to fight two wars at once.

One might in fact say that the Third Reich in the spring of 1941 was preparing itself not for two wars, but for three wars: one against the Red Army, one against the British and Americans and a third against the civilian population of Eastern Europe, beginning with the Jews. And here too 'pragmatic economic' motives and genocidal ideology were inseparably intertwined. On the one hand the SS programmes of genocidal population clearance, to begin with the Jews, were embedded in the Generalplan Ost in an extraordinary vision of agricultural and industrial colonization. Conversely, in the Hunger Plan agreed by the Ministries in the spring of 1941 the most straightforward pragmatic calculation of the food supply was combined with assumptions of racial hierarchy to produce a plan for mass murder, which dwarfed even the Wannsee programme.

This global Blitzkrieg, this grand strategy of racial war, turned out, however, to be a strategy not of victory but of defeat. Already at Smolensk in July-August 1941 Barbarossa ran aground. Meanwhile America was ever more firmly committed to providing aid both to Britain and the Soviet Union. Faced with the ever greater certainty of having to fight a two- or even three-front war, the extraordinary strategic synthesis that the Third Reich had concocted over the previous twelve months fell apart. By December Hitler, true to his conspiratorial logic, had declared war on the United States in alliance with the Japanese. Convinced that open war with the United States was, in any case, only a matter of months away, he seized on the strategic diversion provided by the Japanese offensive in the Pacific. It was to his verbal exchanges of January 1939 with Roosevelt that Hitler repeatedly returned in the autumn of 1941 as he was mulling over both the ultimate shape of the Final Solution and the possibility of a strategic escape from the two-front war in which the Third Reich now found itself.

By any reasonable estimation, Hitler's declaration of war on the United States sealed the fate of Germany. The economic and military forces arrayed against the Third Reich by early 1942 were overwhelming. As we have shown, this fatalistic view was shared by all those most closely involved with the management of the German war effort up to the Moscow crisis. Udet of the Luftwaffe, Fromm of the army, Thomas of the Wehrmacht high command, Todt in the Armaments Ministry, Canaris in intelligence, Rohland and his colleagues in the Ruhr, all came to the same conclusion. All these men had thrown in their lot with

Hitler's regime. But they were not ignorant of the basic trends of early twentieth-century history. They were as convinced as the vast majority of their contemporaries of the pivotal importance of the United States economy. None of them doubted that once American industrial capacity was mobilized - and they were fully aware of the measures that had already been taken in 1940 and 1941 - Germany's situation would be worse than that of 1918. To have thought anything else would have been to fly in the face of contemporary common sense, well reflected in the anxieties of the general public that were faithfully recorded by Gestapo informants. The full extent of America's production triumphs after 1942. came as a surprise even to the Americans. But the basic script had already been written in 1917-18 and in the endless retelling of the Fordist narrative throughout the 1920s and 1930s. And the fact was, of course, that the pessimism of the leading German experts did not even give full weight to the extraordinary industrial and military staying power of the Soviet Union that in fact turned out to be the Wehrmacht's main problem in 1942 and 1943.

This pessimism, however, should throw stark light on the group of individuals who took charge of the German war effort in the aftermath of the Moscow crisis. There has never been any argument about the motivations of men such as Herbert Backe, the orchestrator of the Hunger Plan, or Gauleiter Fritz Sauckel with his pan-European press-gangs. Nor should there be any further argument about Albert Speer. These men were not unpolitical agents of technocratic efficiency. They were the Hitler loyalists willing to do their bit for the Third Reich to the bitter end. They were the men on whom Hitler could rely even in the last months of the war. And they would literally stop at nothing to continue the fight. Speer's 'armaments miracle' relied on resources mobilized by every facet of the Nazi state. The Reichsbank, the Ministry of Economic Affairs and the Finance Ministry played an important but largely unacknowledged role in preserving the stability of the German currency, at least until the beginning of 1944. German industry rallied all its energies in a desperate effort to prevail against the Soviet Union. But these seemingly innocuous components of the German war effort were multiply interconnected with the sinister nexus of political power organized around the questions of labour and food by Gauleiter Sauckel, State Secretary Herbert Backe, Hermann Goering and Heinrich Himmler. Through their combined efforts, in 1942 millions of extra workers were

mobilized for German industry and the food balance of Europe was drastically redistributed so as to secure the calories and protein necessary to fuel Albert Speer's armaments miracle. As we showed in Chapter 16, in the summer of 1942 even the wholesale gassing of the Jews of Poland was made to serve a functional purpose in this radicalized form of Total War. And from the summer of 1943 onwards Speer came to rely ever more heavily on a coercive partnership with Heinrich Himmler and the SS.

The emphasis on rationalization in the management of the German war effort that emerged from the crisis of 1941 was certainly new. And after Speer's appointment German armaments output did increase. However, to treat this as the apolitical expression of Speer's technocratic abilities is to miss the point. The entire purpose of the 'armaments miracle' was political. Loudly trumpeted by the new line in 'armaments propaganda', it served to answer the fundamental doubt that increasingly beset the German war effort. The essential message of the rationalization campaign was that Germany's obvious material inferiority need not be fatal. With the proper application of will-power and energetic youthful improvisation, more could be produced for less. And, as the Wehrmacht had so often demonstrated, there was no limit to what German soldiers could achieve, provided only that they had the necessary weapons.

The point is not of course to dismiss entirely the increase in armaments production achieved by Speer and Milch. It was real enough. But no less real was its strategic failure. The essence of Hitler's gamble in December 1941 was timing. After the declaration of war on the United States the need to achieve a decisive success against the Red Army was more pressing than ever. In this crucial respect Speer's Armaments Ministry failed. In 1942, in the first full flush of the 'armaments miracle', Germany was considerably outproduced by the extraordinary mobilization of the Soviet economy. This Soviet effort was unsustainable. By 1944 Germany had caught up with and overtaken the Soviet Union. But as both the Soviets and the Germans knew, the summer, autumn and winter battles of 1942-3 were the key to deciding the war on the Eastern Front. And in this crucial period it was the Soviet factories that prevailed. This window of opportunity was so important because during most of 1942 Britain and America's offensive operations against the Third Reich were marginal in their impact. As of the autumn of 1942 this was no longer the case. The weight of British and American material made itself felt

first in North Africa and the Mediterranean, then in the defeat of the German U-boats and, as of the spring of 1943, in sustained aerial bombardment. Combined with the elimination of Mussolini in July 1943, the opening of a significant 'second front' had a truly dramatic effect. For six months in 1943 the disruption caused by British and American bombing halted Speer's armaments miracle in its tracks. The German home front was rocked by a serious crisis of morale. By July 1943 the war was obviously lost.

The final, famous acceleration of German armaments production in 1944, on which the reputation of Speer's Armaments Ministry largely rests, took place amidst a maelstrom of apocalyptic violence that consumed the lives of millions of people and laid waste to a large part of the Continent. First in the Mittelbau and then in the brutal practices of the Jaegerstab, the murderous violence of the SS police state was imported directly into the war economy. Tens of thousands of out-of-date fighters were squeezed out of Germany's factories in the first half of 1944 by mobilizing all available labour and materials, applying virtually limitless powers of repression and exploiting every possibility for economies of scale. In the summer of 1944, Speer and the Jaegerstab maintained a telephone hotline to the ramp at Auschwitz, where SS guards were processing the Jews of Hungary, the last great population to be fed to the gas chambers. It was in the dank, deathly gloom of Hans Kammler's underground factories that the Third Reich made its final futile bid to match the Americans in mass-production.

Hitler had prophesied that if Germany did not prevail against its enemies, it would face a national catastrophe unlike anything in modern history. From 1942 onwards he and his collaborators, Albert Speer chief amongst them, steered Germany directly towards this outcome. Even now, the damage inflicted by Hitler's regime and by his futile war is almost unbearable to contemplate. Decades after the event, the memory of the harm done - to the population of Europe, to the physical fabric of daily life, to the very idea of European civilization - is still enough to inspire feelings of despair, rage and resentment, and not only on the part of Germany's victims. Here is not the place to attempt a review of this horror. But since economic historians have ways of making disasters, such as that which Germany brought down upon itself in 1945, disappear from the long-run trajectory of economic growth, it is worth lingering a little on this scene.

THE WAGES OF DESTRUCTION

The destruction and human misery in Germany in 1945 is barely describable in its scale.² As the Third Reich collapsed, quite apart from the millionfold murder that Germany had committed across Europe, more than one-third of the boys born to German families between 1915 and 1924 were either dead or missing. Amongst those born between 1920 and 1925 losses amounted to 40 per cent. The rest of the German population was subject to uprooting and displacement on a truly epic scale. Whilst the 11 million Wehrmacht men who had survived the war in uniform were herded into makeshift prisoner of war camps administered by the occupying forces, a similar number of 9-10 million non-German displaced persons enjoyed an unwonted degree of freedom, whilst they waited to be repatriated to their homes in Eastern and Western Europe. At the same time 9 million German evacuees streamed back towards their devastated cities. Meanwhile, to the east there was an extraordinary human avalanche, as 14.16 million ethnic Germans were driven systematically out of their homes in Eastern and Central Europe by the embittered Slav population. Of this spectacular exodus at least 1.71 million would die en route. The country to which they 'returned' presented a scene of devastation and poverty that defies description. Large parts of Germany had been reduced to 'a rubble-strewn wasteland in which the living often envied the dead'.³ At least 3.8 million out of a stock of 19 million apartments had been destroyed. In the cities hit hardest by the bombing, losses in housing stock ran to 50 per cent.⁴ Huddled in overcrowded and half-ruined apartments, the German population, which until the autumn of 1944 had been reasonably well fed, now starved and froze.

Unlike the Germans during their reign over Europe, the Allies did what was necessary to keep the German population alive. But they did so with reservations. As General Lucius D. Clay, Eisenhower's deputy, put it in June 1945: 'Conditions are going to be extremely difficult in Germany this winter and there will be much cold and hunger. Some cold and hunger will be necessary to make the German people realize the consequences of a war which they caused.'⁵ Nevertheless, Clay also insisted that 'this type of suffering should not extend to the point where it results in mass starvation and sickness'.⁶ Joint Chiefs of Staffs Directive 1067, the basic instructions issued to the occupying forces in 1945, specified that food should be provided to Germany sufficient only to prevent 'disease and unrest'. Until 1948, however, the food supply in all

four zones of occupation fell well short of what was required. As a direct result of decisions taken by Speer and the Zentrale Planung in 1943 and 1944, the nitrogen fertilizer needed by German farms had been directed instead to the production of explosives and ammunition. Yields were drastically down. To make matters worse, Germany's richest grain surplus area east of the Oder-Neisse was awarded to the Poles at the Potsdam agreement. Supplies were brought in from across the Atlantic, but by the early summer of 1946 rations in many parts of urban Germany were below 1,000 calories per day. Despite the flourishing black market, the evidence of serious malnutrition was unmistakable. Mortality increased as did the incidence of hunger-related diseases. Infection rates for diphtheria, typhoid and tuberculosis in the British and American zones doubled. The birth weight of babies fell drastically. Even the most intrepid statisticians hesitate to plumb the depths to which Germany had fallen by the end of 1945. Money had long since ceased to function in any ordinary sense of the word. One estimate for 1946 puts German per capita GDP at just over \$2,200, a figure not seen since the 1880s, one-tenth the level that Germans enjoy today. And this certainly exaggerates the actual level of economic activity in the second half of 1945. Coal production, the lifeline of modern urban society, was down by 80 per cent, and the coal that was available could not be distributed, given the ruination of the railway system.

Nor should we underestimate the intensity of hatred felt towards Germany by its neighbours and former enemies. If it is true that Germans after 1945 were forced to swallow at least some of their sense of victimhood, it is no less true that Germany's former enemies thought it better to forget the sense of rage that clearly motivated much of Allied policy in the immediate aftermath of the war. In 1945 along the Dutch-German border, American GIs passed signs that read: 'Here Ends the Civilized World'.⁷ It is one of the most persistent myths in post-war history that the Allies learned the lesson from World War I not to extract reparations from Germany. In fact, both halves of Germany paid substantially higher reparations after 1945 than the Weimar Republic ever did. Not surprisingly, the Soviets were most determined in their pursuit of compensation. What was to become the German Democratic Republic suffered the dismantling of at least 30 per cent of its industrial capital stock and paid occupation costs and reparations to the Soviet Union which even in 1953 still totalled almost 13 per cent of its national

income.⁸ The Federal Republic for its part was more leniently treated. But it too made payments between 1953 and 1992 totalling in excess of 90 billion Deutschmarks. And it was not merely physical capital that was dismantled. In the Soviet zone, tens of thousands of suspect members of the Nazi party were rounded up for interrogation and summary trials. Many thousands were executed. The Western powers, not surprisingly, adopted more legalistic procedures. Roughly 200,000 Nazi suspects were arrested and detained in internment camps, including many leaders of German big business. Of 5,153 individuals accused of major war crimes, 668 were condemned to death by military tribunals. In addition, in the first burst of enthusiasm, the Western Allies dismissed almost half the civil servants in their zones and required millions to register for denazification. Though this process ultimately degenerated into a cynical farce, in its early stages it was perceived by the German population as a threatening intervention in the structure of social life. Viewed in conjunction with the high-profile trials at Nuremberg, it was one more sign of Germany's pariah status.

The initial post-war period thus went a long way towards confirming Hitler's apocalyptic view of politics. Germany had ceased to exist as a political entity, as a military force or an economic unit. The terrible irony, however, is that in the years that followed it was not Hitler's logic but Stresemann's that prevailed. In 1919, with his eye on the Bolshevik threat in the East, Stresemann had predicted that the time would soon come when Germany would again be needed. After World War II, with the Red Army in Vienna and Berlin, it took barely two years for the same insight to impose itself in Washington and London. To stave off collapse and a surge in support for the Communist party, reconstruction began already over the winter of 1946-7. In the 1920s Stresemann had gambled that the German economy was so integral to the wider economy of Europe that it would be in the interest of none of the victor powers to see it permanently crippled. In 1947 American Secretary of State General George Marshall made his famous offer of aid to Europe dependent on the inclusion of Germany. At first this was hard for France to swallow. France's national programme of economic reconstruction after 1945 was premised on the assumption that it would be France not Germany that controlled the resources of the Ruhr. But within three years of Marshall's announcement, it was the French, as they had done in 1929, who came forward with proposals for European integration

based this time around a European Coal and Steel Community and a European Defence Community. To complete the bitter irony, Konrad Adenauer, who as the Chancellor of the Federal Republic between 1949 and 1963 was to steer West Germany towards its position at the heart both of the European Community and NATO, was in fact two years older than Gustav Stresemann, who had been only 51 at the time of his death in 1929.⁹

A functioning parliamentary system, an alliance with America and closer European economic integration were all goals to which Stresemann clearly aspired. But in the 1920s Weimar politics had still been animated and ultimately destabilized by the idea that Germany would one day re-emerge as a great power in the classic eighteenth- and nineteenth-century sense. What precisely this meant was already questionable in the aftermath of World War I and its demonstration of the futility of war as a means of great power politics. But 'freedom of action' in international relations was clearly still constitutive of full sovereignty, for Stresemann as much as for most other Europeans. After the horror of Nazism and World War II, democratization, the Western alliance and closer European integration were all back to the fore. The apocalyptic temptation of militarism was largely exorcized from Europe. Its dying embers flared up only occasionally in the rearguard actions of empire. But with it also went any aspiration to the 'freedom' once implied by great power status. As early as the autumn of 1943, after the Battle of Kursk, the United States had realized that the dominant power in Europe for the foreseeable future would be the Soviet Union, not Britain, let alone France. At first Roosevelt's administration hoped to adjust to this new reality in cooperation with the Soviets. Together the two super-powers would rule both Europe and the world, under which circumstances it might have been possible to 'do without Germany'. But by 1947 that option was clearly off the table. First West Germany and then East Germany were resurrected as independent states. Their subsequent economic recovery along with that of the rest of Europe was one of the true miracles of the twentieth century. The success in creating a democratic polity in West Germany was also remarkable. So free, in fact, did West Germany seem of the tensions that had plagued the Weimar Republic, that some were even tempted to suppose that the curative fire of National Socialism had been necessary to drive out the German demons. What this ignores, however, is that German democracy after

THE WAGES OF DESTRUCTION

1945 was not as anyone had imagined it in the 1920s. It existed within a strange and truncated form of statehood and much the same might be said for most, if not all, of the former 'great powers' of Europe. Through the middle of Germany's territory ran the new battle lines of the Cold War. Huge forces of occupation were massed on either side, non-European forces - American on one side, Soviet on the other. The threat of nuclear annihilation hung over everyone. And though West Germany certainly had a functioning democracy, the scope of political debate was also incomparably more restricted than it had been in the 1920s. The most explosive issues of Weimar politics - the question of territorial integrity and the question of military parity - were removed, it seemed, for ever from the political agenda. The economic miracle was the abiding preoccupation of the West German Republic, as it was for the rest of Europe. The drama of twenty-five years of unprecedented economic growth moved 'politics', in the classic sense, to the sidelines. Even the remarkable project of European integration resolved itself into an endless process of bartering over milk quotas and national rebates. The catastrophe of the Third Reich had not brought about the extinction of Germany, but what it had done was to draw the curtain on the classic era of European politics. Sixty years later, what else there might be to politics in Europe beyond the tiresome squabbles of discontented affluence remains an open question.

- in B. Thoss and H.-E. Volkmann (eds.), *Erster Weltkrieg: Zweiter Weltkrieg* (Paderborn, 2002), 208-9.
- 106 F. Freund, *Arbeitslager Zement: Das Konzentrationslager Ebensee und die Raketenerue-
stung* (Vienna, 1989), 37-9.
- 107 M. Bornemann, *Geheimprojekt Mittelbau: Die Geschichte der deutschen V-Waffen-
Werke* (Munich, 1971), 53. The standard price per unit, once production reached 5,000
units, was to be 50,000 Reichsmarks per rocket.
- 108 J. C. Wagner, 'Das Aussenlagersystem des KL Mittelbau-Dora', in U. Herbert, K. Orth
and C. Dieckmann (eds.), *Die nationalsozialistischen Konzentrationslager* (Frankfurt,
2002), II. 707-29.
- 109 Messerschmitt became active in this respect as early as October 1942. Budrass,
*Flugzeug-
industrie*, 798.
- 110 Schabel, *Die Illusion*, 183, and H. Moennich, *The BMW Story: A Company in its Time*
(London, 1991), 282-3.
- 111 Eichholtz, III. 74.
- 112 A. Speer, *The Slave State* (London, 1981).
- 113 Neufeld, *Rocket*, 197-213, and T. Allen, *The Business of Genocide* (Chapel Hill, NC,
2002), 208-31.
- 114 Sereny, *Albert Speer*, 403-7 and *A. Speer, Inside the Third Reich* (London, 1970),
499-501.
- 115 J.-C. Wagner, 'Noch einmal: Arbeit und Vernichtung', in N. Frei, S. Steinbacher and
B. C. Wagner (eds.), *Ausbeutung, Vernichtung, Oeffentlichkeit* (Munich, 2000).
- 116 Even the Chronik acknowledges that Speer was informed in January 1944 about the
terrible health conditions, and in the light of their impact on performance he agreed to
increase medical provision. BAL R3/1739, 13 January 1944, 8.
- 117 Bornemann, *Geheimprojekt*, 65-7, states that, of 17,500 prisoners provided to the
Mittelbau up to April 1944, 2,937 had died by the end of March 1944, and a further
2,000 had been removed as too ill to work. At the end of 1943 Kammler's work squads
had the highest death rate in the entire concentration camp system. See E. Schulte, *Zwangs-
arbeit und Vernichtung: Das Wirtschaftsimperium der SS* (Paderborn, 2001), 407.
- 118 BAL R3/1738, 10 December 1943, 205.
- 119 Eichholtz, III. 75 and Freund, *Zement*, 57.
- 120 Bornemann, *Geheimprojekt*, 103-10.
- 121 It seems odd in the light of these figures that Neufeld, *Rocket*, 174, describes
Degenkolb's
proposal in early 1943 to reach production of 600 rockets per month by September 1944 as
'absurd' and as evidence for the fact that Degenkolb 'failed to understand that a missile was
much more complex than a locomotive'. Nor is it, in fact, obvious why a mass-produced
ballistic missile is a more complex technological artefact than a mass-produced locomotive.
Relative prices suggest rather the opposite: the standard price for a V2 was 50,000 Reichs-
marks as opposed to a minimum of 100,000 Reichsmarks for a stripped-down Series 52
Kriegslok. Nor was there any significant difference in terms of construction times -
12,000-17,000 hours were required for a locomotive, 12,950 hours for a V2 rocket. See
Gottwaldt, *Kriegslokomotiven*, 3 8 and 66, and Bornemann, *Geheimprojekt*, 114.
- 122 Massive 'American' scale was a hallmark of the entire underground factory programme.
See Saur's final report to Hitler in the summer of 1944, Mueller, in *DRZW* 5/2, 361.

19 Disintegration

- 1 For Hitler's determination to hold the Donetz region, see W. A. Boelcke, *Deutschlands
Ruestung im Zweiten Weltkrieg: Hitlers Konferenzen mit Albert Speer 1942-1945* (Frank-
furt, 1969), 288 and Manstein's account in E. von Manstein, *Lost Victories* (Chicago,
1958), 450-512.
- 2 J. Ellis, *Brute Force: Allied Strategy and Tactics in the Second World War* (London, 1990),
306-42.

- 3 M. Middlebrook, *The Berlin Raids: RAF Bomber Command Winter 1943-1944* (Harmondsworth, 1988).
- 4 BAL R3/1738, 190-92. Speer could not resist even this opportunity for grandstanding at the expense of the military. Shunting aside the procurement officers, he took personal charge of the rescue effort. Echoing Goebbels's notorious headline 'the march is easier without baggage', Speer even expressed relief that so much burdensome paperwork had been destroyed. Hans Kehrl, who had a more realistic appreciation of what went into running the war economy, was incensed. See H. Kehrl, *Krisenmanager im Dritten Reich* (Duesseldorf, 1973), 326-30.
- 5 DRZW 7.75-87 and 272-81.
- 6 Mueller, in DRZW 5/2. 379.
- 7 IMT XXXVII, doc. 1 172, 662.
- 8 E. F. Ziemke, *Stalingrad to Berlin: The German Defeat in the East* (Washington, 1968), 218-47.
- 9 *Ibid.*, 272-95.
- 10 W. Murray, *Luftwaffe* (London, 1985), 319-20 and DRZW 7. 87-111, 261-72.
- 11 Judged against the Allied standard of 5 kills, no less than 5,000 Luftwaffe pilots qualified as aces. As compared to the leading Allied score of 65 kills, compiled by the Russian Ivan Kohzedub, there were 82 German pilots with 100 or more victories and 7 men with more than 200 kills, including Eric Hartmann with a staggering 352. see J. Scutts, *Messerschmitt Bf 109: The Operational Record* (Shrewsbury, 1999), 132. For the other end of the spectrum, see Murray, *Luftwaffe*, 338.
- 12 As the Speer Chronik noted, the Jaegerstab until Speer's return on 26 May 1944 was based 'too heavily' on the Air Ministry. See BAL R3/1739, 26 May 1944, 93.
- 13 An obvious but too often overlooked fact, duly noted by Boelcke in his introduction to *Deutschlands Ruestung*, 12.
- 14 See the highly favourable comments on Saur as a potential source in PRO FO 935/161, Saur FD 3250/45, USSBS team 86 Record. Abelshauser too notes the horrible irony of Saur's appearance at the post-war industrialists' trials, not as a defendant charged with crimes against humanity, but as a witness for the prosecution. See W. Abelshauser, in L. Gall (ed.), *Krupp im 20. Jahrhundert* (Berlin, 2002), 470.
- 15 T. Allen, *The Business of Genocide* (Chapel Hill, NC, 2002), 232-9.
- 16 For an account of the train which provided a conference centre and accommodation for 60-80 men, see BAL R3/1740, August 1944, 205.
- 17 P. Schmoll, *Die Messerschmittwerke im Zweiten Weltkrieg* (Regensburg, 1998), 144.
- 18 *Milch Case*, II. 527, NOKW-017 54.
- 19 Eichholtz, HI. 23.
- 20 After an outbreak of indiscipline in the Erla Messerschmitt factory, in the spring of 1944, Kammler recommended to the Jaegerstab the practice of hanging 20 or 30 choice troublemakers. 'Since they were strung up, everything has got back to normal.' O. Groehler, *Geschichte des Luftkrieges 1910 bis 1980* (East Berlin, 1981), 415. The German clearly implies that they were left hanging as an example to their colleagues.
- 21 IMT, *Nazi Conspiracy and Aggression* (Washington, 1946-7), IV, 1584-III*-PS, 118-24.
- 22 Schmoll, *Messerschmittwerke*, 7,186-7. Conversely, the Luftwaffe was by far the largest employer of Flossenbuerg labour, accounting for 50 per cent of the 34,000 slaves it provided to the war effort. The next largest employers were the ammunition producers with 17.5 per cent; 12 per cent of the inmate-labour worked on tanks. See K. Orth, *Das System der nationalsozialistischen Konzentrationslager* (Hamburg, 1999), 239.
- 23 On Flossenbuerg and Mauthausen's labour contracting, see H. Brenner, 'Der Arbeitsinsatz der KZ-Haeftlinge in den Aussenlagern des KZ-Flossenbuerg', and B. Perz, 'Der Arbeitseinsatz im KZ-Mauthausen', in U. Herbert, K. Orth and C. Dieckmann (eds.), *Die nationalsozialistischen Konzentrationslager* (Frankfurt, 2002), II. 682-706 and 533-57.
- 24 C. Gerlach and G. Aly, *Das letzte Kapitel: Der Mord an den ungarischen Juden* (Stuttgart, 2002), 163-71.

- 25 Eichholtz, III. 239.
- 26 Orth gives the somewhat different figures of 458,000 deportations to Auschwitz from Hungary and 350,000 gassings. See Orth, *Das System*, 256-7.
- 27 Milch Case, II. 555. Jaegerstab conference, 26 May 1944, NOKW-336.
- 28 Milch Case II. 557-8, Jaegerstab conference, 27 June 1944, NOKW-359. This same group is also referred to in the Speer Chronik though they are not identified as Jews, see BAL R3/1739, June 1944, 137.
- 29 PRO FO 935/161, Saur, FD 3250/45, minutes of interview with Herr Saur, 7 June 1945, 26.
- 30 PRO FO 1078/142, Ueber die Gruende der erhoehten Lieferungen.
- 31 PRO FO 935/161, Saur, FD 3250/45, USSBS team 86 R, 4.
- 32 In October 1943 Milch even boasted that German production in 1944 would soon overtake that of the United States. See DRZW 7. 237.
- 33 The same conclusion is reached by L. Budrass, *Flugzeugindustrie und Luftreueung in Deutschland* (Duesseldorf, 1998), 867-8.
- 34 See the carping remarks in BAL R3/1738, 128-9, 136, 145, 186. For Speer's celebration of Werner only a year earlier, see R3/1736, 7 August 1942, 61, and for his insistence on Werner's authority over Maybach, see R3/1737, 3 March 1943, 30-31, and 18 April 1943, 46.
- 35 See remarks to press conference in NA T73 192.
- 36 See BAL R3/1738, 2 December 1943, 201.
- 37 Mueller, in DRZW 5/2. 550 and Eichholtz, III. 44.
- 38 L. Herbst, *Der Totale Krieg und die Ordnung der Wirtschaft: Die Kriegswirtschaft im Spannungsfeld von Politik, Ideologie und Propaganda 1939-1945* (Stuttgart, 1982), 339, 436-7; Eichholtz, III. 43. The Speer Chronik is full of critical comments on Kehrl's overly bureaucratic tendencies. See in particular BAL R3/1738, 17 December 1943, 207.
- 39 Already in January Speer had discussed with the Gestapo-SD the measures necessary to protect his collaborators against unwarranted criticism. See BAL R3/1739, 14. He also enforced an agreement between Kehrl on the one hand, and Hayler and Ohlendorf, the SS men who now controlled the Ministry of Economic Affairs, on the need for a 'positive attitude towards the system of Selbstverantwortung'. BAL R3/1739, 20.
- 40 Herbst, *Totale Krieg*, 334. Eichholtz, III. 47-8. Mueller, in DRZW 5/2.351-2. NA T73 192, 448 FD 3353/45. 90.
- 41 BAL R3/1739, 23 June 1944, 130.
- 42 Herbst, *Totale Krieg*, 334.
- 43 Eichholtz, III. 48.
- 44 H. Kehrl, *Krisenmanager im Dritten Reich* (Duesseldorf, 1973), 395-7.
- 45 Eichholtz, III. 48.
- 46 DRZW 7.536-56.
- 47 Murray, *Luftwaffe*, 374.
- 48 For Hitler's preoccupation with the Eastern Front at this juncture, see H. Heiber (ed.), *Hitlers Lagebesprechungen: Die Protokollfragmente seiner militaerischen Konferenzen 1942-1945* (Stuttgart, 1962), 583-621. See also the remarks on behalf of the Speer Ministry on the extreme seriousness of the situation, BAL R3/1740, 9 July 1944, 156-7.
- 49 Ziemke, *Stalingrad to Berlin*, 313-32; J. Erickson, *The Road to Berlin* (London, 1983), 215-46; D. M. Glantz and J. M. House, *When Titans Clashed: How the Red Army Stopped Hitler* (Lawrence, Kan., 1995), 195-215.
- 50 W. Murray and A. R. Millett, *A War to be Won: Fighting the Second World War* (Cambridge, Mass., 2000), 450. For details, see D. M. Glantz and H. S. Orenstein (eds.), *Belorussia 1944: The Soviet General Staff Study* (London, 2001). According to one estimate, the Soviet Union received 125,000 American-made trucks in 1944 and 150,000 after January 1945. A typical Soviet Howitzer regiment in the spring of 1944 relied for its mobility on 7 Soviet 1.5-ton trucks, 35 American-made 2.5-ton vehicles and a jeep. See W. S. Dunn, *Soviet Blitzkrieg* (London, 2000), 76-7.

- 51 Glantz and House, *When Titans*, 214.
- 52 Eichholtz, II. 37, and Murray, *Luftwaffe*, 367.
- 53 Eichholtz, III. 33.
- 54 G. Janssen, *Das Ministerium Speer: Deutschlands Ruestung itn Krieg* (Frankfurt, 1968), 2.65-82.
- 55 Eichholtz III. 112.
- 56 Eichholtz, III. 50.
- 57 Mueller, in *DRZW*, 2. 346-7, 570, W. Naasner, *Neue Machtzentren in der deutschen Kriegswirtschaft 1942-1945* (Boppard, 1994), 77-8.
- 58 Compare A. Speer, *Inside the Third Reich* (London, 1970), 507-31, with the contemporaneous account of Speer's activities in *BAL R3/1740*, 20-21 July 1944, 168-9.
- 59 Eichholtz, III. 53.
- 60 Mueller, in *DRZW* 5/2. 402-3.
- 61 *Ibid.*, 402. The Speer *Chronik* notes the wave of enthusiasm that swept the war administration in the aftermath of the bomb plot. See *BAL R3/1740*, 27 July 1944, 171. By September 1944 Speer resorted to issuing special green ties to those colleagues who demonstrated particularly robust optimism. See *BAL R3/1740*, 19 September 1944, 258.
- 62 Mueller, in *DRZW* 5/2.551.
- 63 See the fascinating discussion of the seriously inaccurate contemporary estimates in Eichholtz, III. 95-113. The following is based instead on M. Harrison (ed.), *The Economics of World War II* (Cambridge, 1998), 10-17.
- 64 Aircraft was the one area in which Japanese production made a really significant difference to the balance, with Japanese production running at 21,000 aircraft in 1944. However, the figures given here understate the Axis disadvantage since they record numbers of aircraft rather than airframe weight or the value of planes produced. British and American production included large numbers of extremely expensive heavy bombers, for which neither Japan nor Germany had any counterpart.
- 65 *Statistisches Handbuch von Deutschland* (Munich, 1949), 292.
- 66 Kehrl, *Krisenmanager*, 316-18. Mueller, in *DRZW* 5/2. 365-9.
- 67 Eichholtz, II. 508.
- 68 These figures clearly include equipment other than armaments. *DRZW* 5/2. 187.
- 69 R. G. D. Allen, 'Mutual Assistance between the US and the British Empire, 1941-1945', *Journal of the Royal Statistical Society* (1946), 243-77, and Special Combined Committee of Combined Production and Resources Board, *The Impact of the War on Civilian Consumption in the United Kingdom, the United States and Canada* (London 1945), 8-9.
- 70 Assuming that their average productivity was 70 per cent of their German colleagues and assuming that labour's share in overall output (as opposed to the share attributable to German capital) was 70 per cent, foreign labour's contribution to German armaments output can be estimated roughly at 15 per cent.
- 71 Two drafts are in *IWM FD 3038/49*, Sc. 395, 145-53 and 154-8 respectively. The quotes come from the second document. See also Herbst, *Totale Krieg*, 420-21.
- 72 On the global experience with inflation during World War II, see A. J. Brown, *Great Inflation, 1939-1951* (London, 1955), and A. S. Milward, *War, Economy and Society 1939-1945* (Harmondsworth, 1977), 105-9.
- 73 W. A. Boelcke, *Die Kosten von Hitlers Krieg: Kriegsfinanzierung und finanzielles Kriegserbe in Deutschland 1933-1948* (Paderborn, 1985), 112.
- 74 The following is from *BAL R 2501 6452*, Reichsbank report, 31 August 1942. On the Greek economy under occupation, see G. Etmektsoglou, 'Changes in the Civilian Economy as a Factor in the Radicalization of Popular Opposition in Greece, 1941-1944', in R. J. Overy, G. Otto and J. Houwink ten Cate, *Die 'Neuordnung' Europas: NS-Wirtschaftspolitik in den besetzten Gebieten* (Berlin, 1997), 193-240, and M. Mazower, *Inside Hitler's Greece* (New Haven, 1993), 53-72.
- 75 A. S. Milward, *The New Order and the French Economy* (Oxford, 1984), 136-7 and

273. Clearly, these demands for food, consumer goods, industrial supplies and construction services went far beyond the armaments deliveries discussed above.
- 76 Data from *Statistisches Handbuch von Deutschland*, 555, and similar results in Boelcke, *Kosten*, 83-114.
- 77 W. A., Boelcke, *Die deutsche Wirtschaft 1930-1945* (Duesseldorf, 1982), 344.
- 78 M. Harrison, 'Resource Mobilization for World War II', *Economic History Review* (1988), 184.
- 79 M. Brackmann, *Vom Totalen Krieg zum Wirtschaftswunder: Die Vorgeschichte der westdeutschen Waehrungsreform 1948* (Essen, 1993), 69-74.
- 80 G. Aly, *Hitlers Volksstaat* (Frankfurt, 2005), 334-9.
- 81 Boelcke, *Kosten*, 106—7.
- 82 Eichholtz, III. 567-71.
- 83 On Kehl's frustration at his inability to control investment, see Herbst, *Totale Krieg*, 405.
- 84 IWM FD 3038/49, Sc. 395, 145-53 and 154-8.
- 85 Brackmann, *Vom Totalen Krieg*, 71. M. L. Recker, *Nationalsozialistische Sozialpolitik im Zweiten Weltkrieg* (Munich, 1989), 217-33.
- 86 *Ibid.*, 47.
- 87 Herbst, *Totale Krieg*, 419.
- 88 This is one of the serious misreadings that undermine the central thesis of Aly, *Hitlers Volksstaat*.
- 89 Mueller, in *DRZW* 5/2,432.
- 90 Eichholtz, III. 54-5.
- 91 For an excellent account, see A. C. Mierzejewski, *The Collapse of the German War Economy, 1944-1945* (Chapel Hill, NC, 1988).
- 92 British Bombing Survey Unit, *The Strategic Air War Against Germany 1939-1945* (London, 1998), 41.
- 93 *DRZW* 9/1.443-57.
- 94 Abelshauser, in Gall (ed.), *Krupp*, 437.
- 95 Mierzejewski, *The Collapse*, 103-76.
- 96 Eichholtz, III. 65.
- 97 J. F. Trent, 'Food Shortages in Germany and Europe 1945-1948', in G. Bischof and S. E. Ambrose (eds.) *Eisenhower and the German POWs* (Baton Rouge, La., 1992), 104.
- 98 *DRZW* 7.619-34.
- 99 Ellis, *Brute Force*, 421.
- 100 Murray and Millett, *War to be Won*, 470.
- 101 See Heiber (ed.), *Hitlers Lagebesprechungen*, 724-80.
- 102 All quotes in what follows from H. Schwendemann, 'Lebenslaeufer ueber verbrannte Erde', *Frankfurter Allgemeine Zeitung*, 26 April 2000, and H. Schwendemann, 'Drastic Measures to Defend the Reich at the Oder and the Rhine ... A Forgotten Memorandum of Albert Speer of 18 March 1945', *Journal of Contemporary History*, 38 (2003), 597-614. The English translation of the document in this article paints Speer in an even worse light than the German original reproduced in the *FAZ*.
- 103 For the following, see R. Overmans, *Deutsche militaerische Verluste im Zweiten Weltkrieg* (Munich, 1999).
- 104 The central flaw of Joerg Friedrich's otherwise powerful book, *Der Brand: Deutschland im Bombenkrieg 1940-1945* (Munich, 2002).
- 105 For what follows, Eichholtz, III. 663-9.
- 106 Kehl, *Krisenmanager*, 419-34.
- 107 For one copy of Wagenfuhr's report, see IWM FD 3057/49, *FIAT Report 1312*, later published as *Die deutsche Industrie im Kriege* (Berlin, 1954).

20 The End

- 1 Hitlers politisches Testament (Hamburg, 1981), 103.
- 2 A useful summary is provided by H.-U. Wehler, *Deutsche Gesellschaftsgeschichte* (Munich, 2nd edn., 2003), IV, 941-54.
- 3 M. R. Marrus, *Unwanted: European Refugees in the Twentieth Century* (New York, 1985), 324.
- 4 G. W. Harmsson, *Reparation, Sozialprodukt, Lebensstandard: Versuch einer Wirtschaftsbilanz* (Bremen, 1948), 57.
- 5 J. E. Smith (ed.), *The Papers of General Lucius D. Clay* (Bloomington, Ind., 1974), I, 24.
- 6 *Ibid.*, I, 41.
- 7 G. Bischof and S. E. Ambrose (eds.), *Eisenhower and the German POWs* (Baton Rouge, La., 1992), 17.
- 8 R. Karlsch, *Allein bezahlt? Die Reparationsleistungen der SBZ/DDR 1945-1953* (Berlin, 1993), 234.
- 9 J. Wright, *Gustav Stresemann*, Oxford, 2002, 515.