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## Germany's Construction Industry: Stabilization on the Horizon

Bernd Bartholmai and Martin Gornig

The construction volume this year will reach a value of just under euro 230 billion – a drop as compared to 2004 of close to 3%. At approximately 1.5%, the price increase should turn out somewhat higher than the previous year, which means the real construction volume will thus shrink by a good 4%. While the development during the first six months of this year was clearly on the decline, improved demand in the second half of the year makes a recovery likely.

After many years of a downward trend, the construction industry could bottom out next year. Even if real construction of new buildings probably will not grow, at least the shrinking process is likely to come to an end. In particular commercial construction is a motor for growth.

### Development of construction volume

According to the revised results based on the turnover tax statistics<sup>1</sup> now available, 2003 saw a real<sup>2</sup> construction volume in Germany totaling euro 38.5 billion – a somewhat higher value than that estimated in the provisional calculations from the past year.<sup>3</sup> In particular, this correction has an impact on the contribution made by the finishing trade to these statistical figures. As in previous years, the turnover made by the numerous small businesses of this sector enjoyed a more favorable development than the companies with 20 plus employees who are covered in the current construction report. This was primarily due to contracts for repairs.

At a good 3%, the decrease of real construction volume in 2003 was not as high as in 2002 and 2001, when shrinkage rates of up to 6% were recorded. In 2004, the downward trend continued at a similar pace where the construction of new buildings is concerned. The real construction volume for 2004 is estimated at a total of euro 231 billion, which would again mean a drop of about 3%.

<sup>1</sup> The turnover tax statistics serve primarily to define the work and services of the finishing trade since the current statistic report does not reliably reflect this sector.

<sup>2</sup> At 2000 prices.

<sup>3</sup> Cf. Andreas Cors: 'Bauproduktion: Talfahrt nur zeitweise gebremst'. (Construction of New Buildings: Downward Slide only Temporarily Slowed) In: *Wochenbericht des DIW Berlin*, no. 41/2004.

The data for the first half of 2005 do not yet indicate an upturn of construction activity, either. On the contrary: the negative growth of construction work and services even increased. As compared to the first half of 2004, it amounted to over 6%. The value for the first quarter was depressed as a result of the low number of work days and relatively bad weather; on the other hand production in the second quarter was favored by catch-up and calendar effects. Adjusted for calendar days, the rates of change for both quarters were less favorable than in 2004.

Since 2004 the gap between East and West Germany has opened once again<sup>4</sup>. While in 2003, after many years, the construction volumes in the new Länder again began to develop more favorably than in the West, the values for 2004 and 2005 revealed a stronger reduction of construction volume. Above all, the poor development of the construction industry proper characterizes the situation in the eastern part of Germany; the reduction of the work and services amounted to more than 5% in 2004, in the first half of 2005 even more than 11%. In West Germany the corresponding decline rates were just under 4% and 9% respectively. The finishing trade in the West also exhibits a more favorable trend than in the East during the first half of 2005.

Despite the weak economic situation in the construction sector, prices have risen noticeably since the spring of 2004. For example, in structural engineering (for residences, office buildings and buildings serving commercial operations), price increase rates averaging 1.5% were recorded, after near stagnation in the previous years. Presumably, energy costs, which rose considerably, and in particular the rise in the price of construction steel, led to this price leap.<sup>5</sup> Primarily, this impacts the building shell work field, that is, the services provided in the construction industry proper. It is difficult to explain the sustained price increase in the area of finishing since here demand also continued to be weak.

## Development of demand differentiated by construction sectors

### Housing construction

The housing construction volumes can be subdivided into the area of construction of new building and the

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<sup>4</sup> In this context it is to be kept in mind that the demarcation of these two areas has been changed in that all of Berlin is now categorized as one of the new *Länder*, whereas previously only East Berlin was included there.

<sup>5</sup> It is worth noting that in this sector the prices had even dropped in 2000 until 2003.

remaining field of construction measures taken in existing buildings. The numbers calculated for the new construction volume are based on information on construction costs for buildings newly constructed, as set out in construction activity statistics. The remaining field covers conversions, extensions, refurbishment work and repairs. In the recent past less than half of all construction work and services were performed in the context of new construction; 55% to 60% of such work served to preserve and improve existing buildings. In this context, the share of measures implemented on existing buildings was just under two-thirds in East Germany, clearly higher than in the West, which recorded higher numbers for newly constructed buildings.

The schematic depiction of construction permits, adjusted to the season (cf. figure 1), shows that since 2002, the development of demand for new construction in the West and East has been characterized particularly by construction projects for private homes being accelerated.<sup>6</sup> In the course of 2004 the building permit applications in this sector then experienced a sharp downturn. The permits applied for multiple family homes since 2002 have developed comparatively steadily. The tendencies were towards growth in the demand for owner-occupied homes, and only a moderate decline in new residential buildings or tenements leased out to tenants.

Calculations concerning the structure of construction work and services show that the volume for new construction in West Germany grew in 2003 and 2004 by approximately 1.5% in real terms following a long shrinkage period (private home construction even reached a growth rate of 2% to 3%). In contrast, the downward spiral continued in East Germany. While the overall volume of new construction continued to decrease, the sector for private home construction did become more stable.<sup>7</sup>

All in all, the positive demand impulses in new construction did not suffice for the total housing construction work and services sector to grow. Though in the construction industry proper a clear stabilization in hours worked can be recorded, and thus also a temporary growth in production, this trend already began to slump in mid-2004.

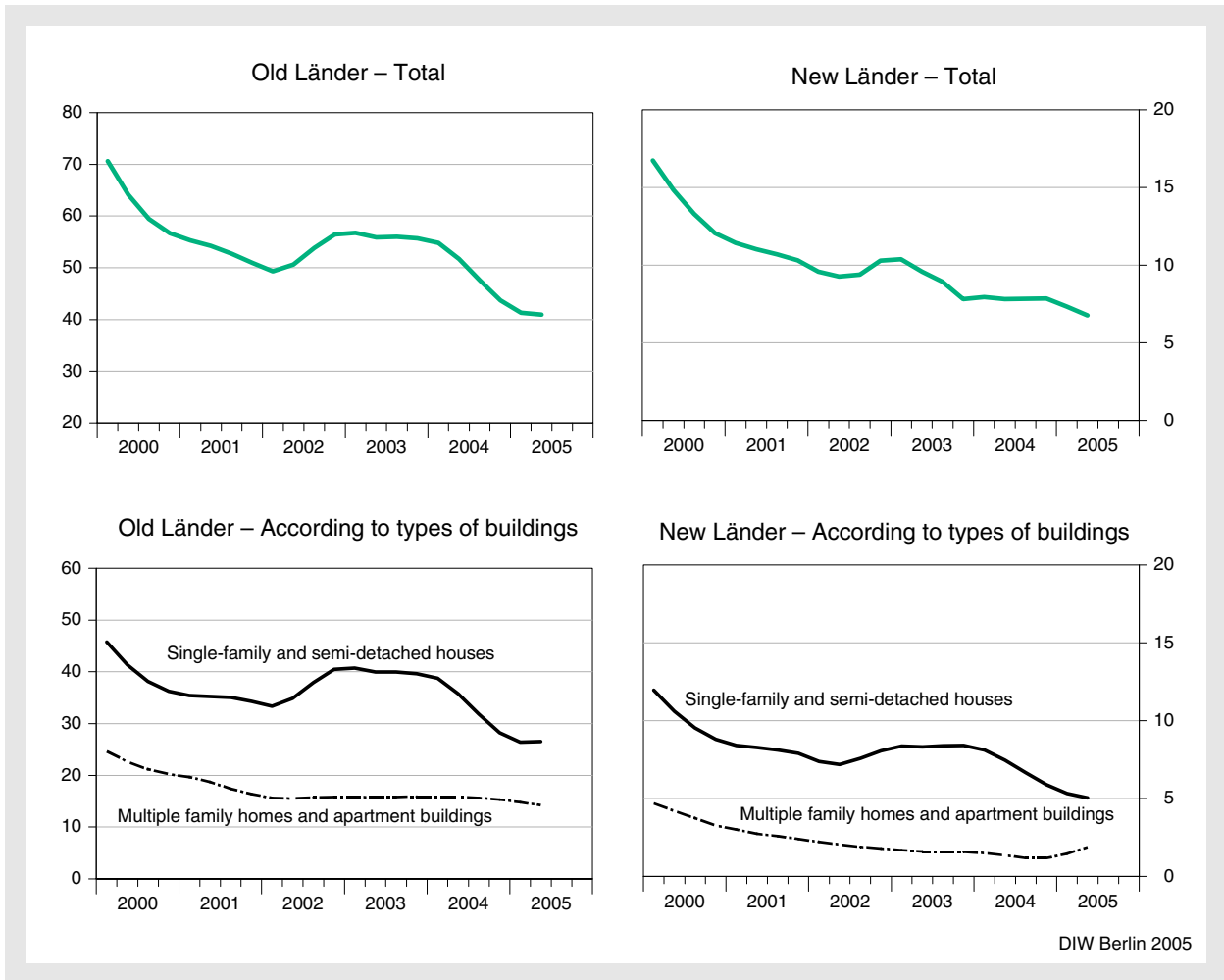
The development in the finishing industry turned out to be the decisive factor for the total housing construction volume. The largest portion of the total turnover for the

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<sup>6</sup> This was induced by the continuing political discussion revolving around the cutback or possible cutting altogether of the *Eigenheimzulage*, a tax bonus for home-owners.

<sup>7</sup> Cf. Bernd Bartholmai: 'Struktur der Wohnungsbauleistungen und deren Finanzierung 2000 bis 2004'. (Structure of Housing Construction work and services and their Financing 2000 to 2004) In: *Jahrbuch des Verbandes der Privaten Bausparkassen*. (Annual Publication of Private Construction Funds) Berlin 2005, p. 31 ff.

Figure 1  
**Permits for Housing Construction**  
 In 1000 apartments per quarter



1 Seasonally adjusted by the Berlin Method.  
 Source: Federal Statistical Office, based on official statistics of the construction trade.

industry was allocated to housing construction; real change here hovered at -3% for both 2003 and 2004. While the portion of work and services related to new construction experienced a more favorable development, an above-average recession was recorded for work carried out on existing buildings – from 2002 to 2004, this was 4% to 6% annually. This signifies a notable shift in the trend, for in all the previous years demand for refurbishment and repair services formed a stable pillar which balanced the ups and downs of new construction, at least in West Germany.

After an initial period of soaring renovation services, numbers plunged drastically as early as in the late 1990s in East Germany, though a clear leveling off has occurred in the past two years. One impulse was presumably given by the program 'Stadtumbau Ost' (Rebuild Eastern Cit-

ies), in which context the improved subsidization in 2002 is to be highlighted, which offered higher investment allowances for renovating pre-war buildings. A part of the subsidies must, however, have been used up by the prices, which climbed sharply in this geographical region for this type of work.

Possibly, the general reticence where the renovation and maintenance of existing buildings is concerned could be caused by the reduced expectations as to the rate of return in residential leasing. In the case of owner-occupied homes, uncertain income expectations probably play a larger role. It seems that in many instances the more expensive measures, which could entail new debt burdens, are postponed for this reason.

In the current year, construction activity for housing continued to recede in the first six months – in the west-

Table

## Development of and Forecast for Construction Volume in Germany 2002 to 2006

	2002	2003	2004	2005 <sup>5</sup>	2006 <sup>5</sup>	2002	2003	2004	2005 <sup>5</sup>	2006 <sup>5</sup>
	In euro billions at current prices					Change (%) on the previous year				
Total construction volume	247.40	239.78	235.13	228.3	228.9	-5.7	-3.1	-1.9	-2.9	0.3
Old Länder <sup>1</sup>	197.74	191.05	187.22	182.0	182.6	-5.3	-3.4	-2.0	-2.8	0.4
New Länder and Berlin <sup>1</sup>	49.66	48.73	47.92	46.3	46.2	-7.3	-1.9	-1.7	-3.3	-0.2
	Indices 2000 = 100									
Price development	100.4	100.5	101.8	103.2	104.4	0.1	0.1	1.2	1.4	1.2
Old Länder	100.6	100.6	101.6	102.9	104.1	0.1	0.0	1.0	1.3	1.1
New Länder and Berlin	99.5	100.3	102.3	104.1	105.5	0.3	0.9	2.0	1.7	1.4
	In euro billions at 2000 prices									
Total construction volume	246.42	238.50	231.06	221.3	219.3	-5.8	-3.2	-3.1	-4.2	-0.9
Old Länder	196.49	189.93	184.24	176.8	175.5	-5.4	-3.3	-3.0	-4.0	-0.7
New Länder and Berlin	49.93	48.57	46.82	44.5	43.8	-7.5	-2.7	-3.6	-4.9	-1.6
According to construction areas:										
Housing construction	135.47	132.58	129.02	121.8	119.0	-6.0	-2.1	-2.7	-5.6	-2.3
Old Länder	114.11	111.66	108.92	103.1	101.0	-5.5	-2.2	-2.5	-5.4	-2.0
New Länder and Berlin	21.36	20.93	20.10	18.7	18.0	-9.0	-2.0	-4.0	-6.9	-3.8
Commercial construction	71.46	68.30	66.41	64.9	66.0	-5.8	-4.4	-2.8	-2.3	1.7
Old Länder	54.16	51.47	50.01	49.0	50.0	-5.5	-5.0	-2.8	-2.0	2.1
New Länder and Berlin	17.31	16.82	16.40	15.9	16.0	-6.8	-2.8	-2.5	-3.1	0.7
Construction for the public sector	39.49	37.63	35.63	34.7	34.3	-5.0	-4.7	-5.3	-2.7	-1.0
Old Länder	28.23	26.81	25.31	24.7	24.5	-4.7	-5.0	-5.6	-2.3	-0.9
New Länder and Berlin	11.26	10.82	10.32	9.9	9.8	-5.7	-3.9	-4.6	-3.9	-1.2
According to category in the construction sector:										
Old Länder										
Construction trade:										
structural and civil engineering <sup>2</sup>	60.92	58.21	56.01	52.6	52.3	-5.5	-4.5	-3.8	-6.2	-0.5
Structural engineering areas	39.63	37.82	36.47	33.7	33.0	-6.5	-4.6	-3.6	-7.7	-1.9
Civil engineering areas	21.29	20.38	19.54	18.9	19.2	-3.4	-4.3	-4.1	-3.3	1.8
Construction installations, miscellaneous construction trades <sup>3</sup>	75.58	72.68	70.13	67.0	66.1	-7.1	-3.8	-3.5	-4.4	-1.4
Other areas <sup>4</sup>	60.00	59.05	58.09	57.2	57.1	-3.0	-1.6	-1.6	-1.5	-0.1
New Länder and Berlin										
Construction trade:										
structural and civil engineering <sup>2</sup>	20.19	19.45	18.42	17.2	16.8	-9.8	-3.7	-5.3	-6.8	-2.3
Structural engineering areas	11.51	10.96	10.22	9.2	8.8	-11.8	-4.8	-6.8	-10.1	-3.9
Civil engineering areas	8.68	8.48	8.20	8.0	8.0	-7.0	-2.3	-3.3	-2.6	-0.3
Construction installations, miscellaneous construction trades <sup>3</sup>	18.05	17.55	17.08	16.2	16.0	-6.5	-2.8	-2.7	-5.0	-1.4
Other areas <sup>4</sup>	11.69	11.58	11.32	11.1	11.0	-5.1	-0.9	-2.2	-1.8	-0.8

1 According to the location of construction sites in the Old and New Länder. — 2 Including preparatory construction site work (was previously included in the main construction trade, excluding pre-cast concrete construction method and other partial areas that have been separated). — 3 Corresponds to the former [definition of] finishing trade, supplemented by divisions predominantly added from main construction trade. — 4 Manufacturing trade (installations, system-built structures and prefabricated constructions), construction-related services, landscape, investors' own work and services. — 5 Forecast.

Source: DIW Berlin calculations, based on official statistics for the construction trade.

ern part of Germany by just under 7% in real terms, in the East by approximately 9%. In light of a general stabilization where permits for new construction projects and construction contracts are concerned, a more favorable development is anticipated for the second half of the year; nevertheless, this will improve the annual result only marginally. The estimated drop by 5.5% in West Germany and by just under 7% in East Germany (cf. table) is

characterized by the pendulum swinging back as a result of the previous surplus of new construction demand.

It is assumed the downwards slide will level out in 2006. No impulses are anticipated for new construction demand but rather, for refurbishment and repair services – in light of the continually rising energy prices, measures for improving heating and thermal insulation may prove to be lucrative.

## Commercial construction

After housing, commercial construction is the most important field of the construction sector; its share in the total construction volume in Germany amounts to just under 30%. In West Germany the figure for commercial construction is somewhat less, in East Germany, at 35%, somewhat higher.

About two thirds of commercial construction are allocated to structural engineering work; one third to civil engineering projects. The latter primarily provides services for the energy and mineral oil industry as well as, and increasingly so, for commercial providers of waste removal and transportation services. Structural engineering projects comprise, among other things, the construction of factory buildings, commercial and storage buildings as well as – and this is by far the largest sector – office and administration buildings. In fewer and fewer instances, these buildings are owned by their users. In particular, the services sector shows a preference for rented properties, with the buildings being initiated and financed by private capital investors or real estate funds; rented properties are also experiencing growing significance in the commercial arena (shopping centers, centers for commerce and business). Correspondingly, the economic situation of the sector that a building's users are active in is losing its significance.

New construction projects are often planned far in advance. Their realization depends greatly on whether sufficient space is already leased out prior to construction. The banks involved in co-financing such projects are also sensitive to this factor and apply increasingly stricter requirements. This means that, although there is an increase in the number of building permits issued, this is reflected in actual production results only after long delays.

Commercial construction has been on the decline for years. While in West Germany the shrinkage process began in 2001, in East Germany it could already be felt in the mid-1990s. The results for all of Germany remained poor for the first half of this year as well. After a minus of 2.8% in 2004, an accelerated drop by 5.2% was recorded. In contrast to 2003, the trend in East Germany was hardly more favorable.

However, the development taken by the contracts awarded in the construction industry proper for commercial construction indicates a clear improvement of the demand for services of commercial construction over the course of the current year. This especially applies for West Germany (cf. figure 2). Both in civil engineering as well as in structural engineering, the number of contracts awarded, adjusted to the season, has risen. Thus, for all of 2005 a drop of construction work and services in this area is anticipated at only 2%. In East Germany,

on the other hand, the number of contracts awarded continues to decline, at least where commercial structural engineering is concerned. For 2005 as a whole, a recession of about 3% will presumably be recorded for commercial construction in East Germany.

In the course of a general pick-up of the economy, commercial construction in Germany should be able to continue its upward trend. This means that for the coming year, after an extended period of negative growth, an expansion of real construction work and services can be anticipated for the first time. With rates of 2% in West Germany and just under 1% in East Germany, however, this growth will be moderate. Due to capacity surpluses existent at many locations, especially for office buildings, it can hardly be expected that commercial construction as a whole will exert any significant impulses on the development of investment. The low number of construction permits for non-housing construction corroborates this assumption (cf. figure 3).

## Construction for the public sector

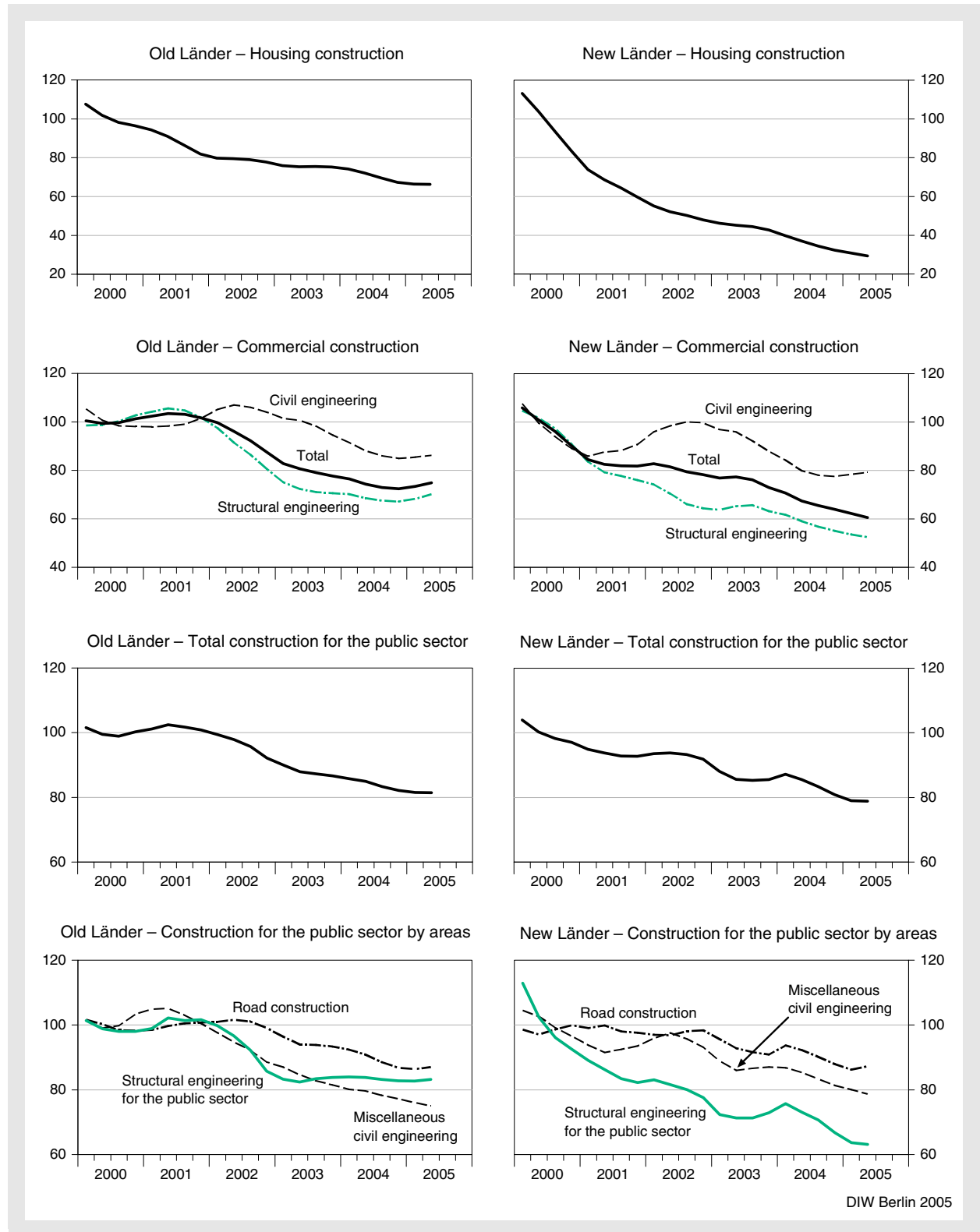
The area of construction for the public sector – within the concept used here of construction trade statistics differentiated by client sectors – corresponds for the most part to the area of public investment in national macroeconomic accounting. However, while there is a certain haziness concerning the demarcation of the business sector on the one hand,<sup>8</sup> it must be kept in mind, on the other hand, that, where construction investments implemented by the state are concerned, the acquisition and divestiture of properties has to be included along with new construction measures in terms of value.

The scope of construction for the public sector is determined by the need for public infrastructure such as schools, roads, city sewage and drainage systems, etc. To what extent construction work and services serving the preservation or expansion of the public infrastructure actually occur depends, however, decisively on the financial situation of the local governing bodies.<sup>9</sup> The most important parties responsible for construction work and

<sup>8</sup> The services for public clients – that is, in the stricter sense, local governing bodies and parties responsible for social security – cannot be so clearly delineated in the reporting system for construction statistics as is actually desired or as is possible in finance statistics. It can be assumed that the construction companies not infrequently include clients who are publicly owned companies in their statistical information so that in the results presented here, services are most likely reflected which should actually have been allocated to commercial construction.

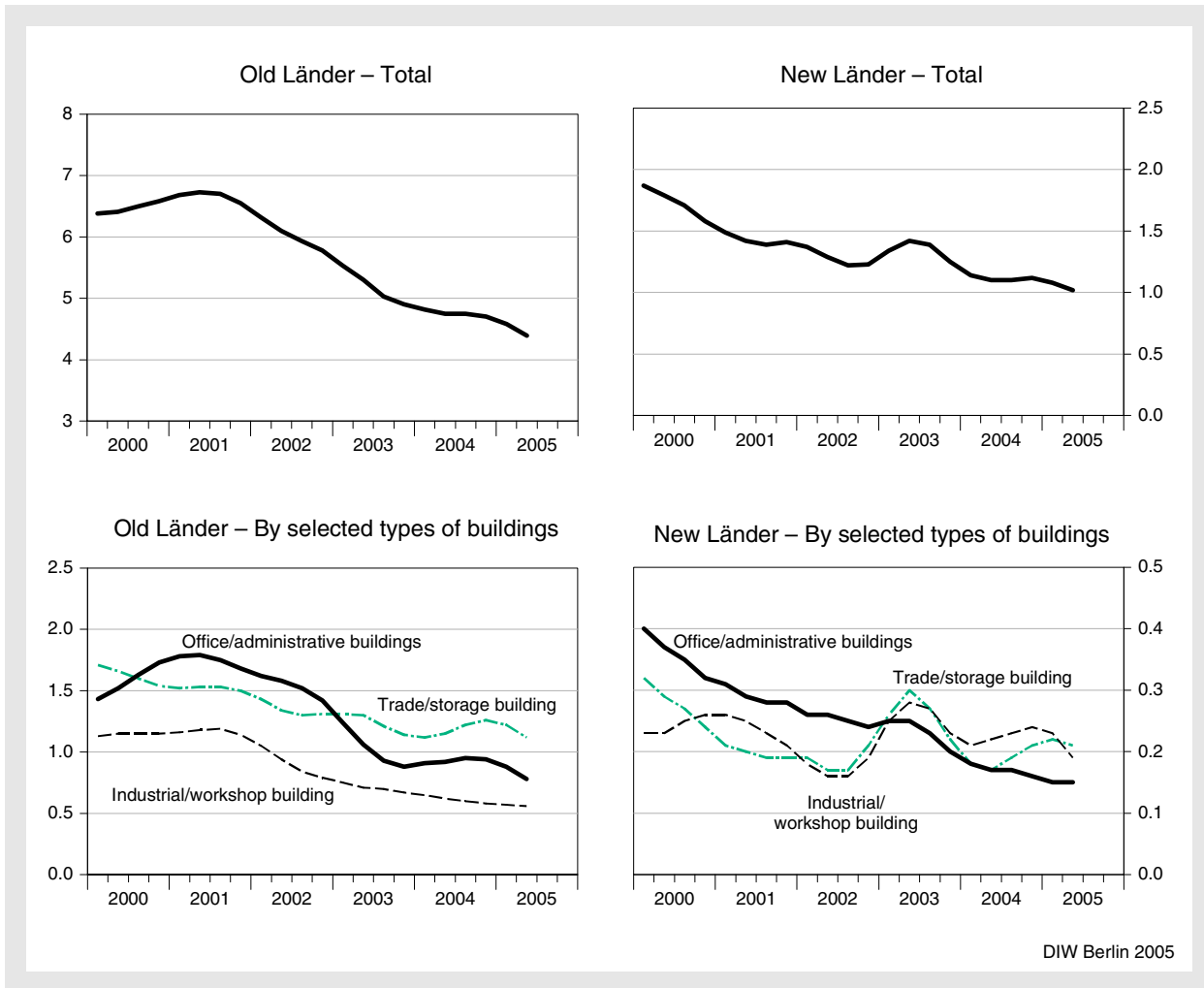
<sup>9</sup> Cf. Dieter Vesper: 'Holt der Osten auf? Entwicklung der öffentlichen Investitionen in Ost- und Westdeutschland'. (Is the East Catching up? Development of Public Investments in East and West Germany) In: *Wochenbericht des DIW Berlin*, no. 25/2005.

Figure 2  
**Incoming Orders in the Main Construction Trade**  
 Value index 2000 = 100<sup>1</sup>



<sup>1</sup> Seasonally adjusted by the Berlin Method.  
 Source: DIW Berlin calculations, based on official statistics of the construction trade.

Figure 3  
**Permits in Non-Housing Construction**  
 Construction costs in euro billions per quarter<sup>1</sup>



<sup>1</sup> Seasonally adjusted by the Berlin Method.  
 Source: DIW Berlin calculations, based on official statistics of the construction trade.

services implemented for the public sector are the municipalities. In road construction and for specific structural engineering measures (for example for universities and colleges), the federal government or the *Länder* are also directly responsible for public investment. In addition, the federal government and *Länder* often contribute to financing municipalities' construction measures by way of urban development subsidies.

Construction work and services provided for public clients declined, continually and sharply, during the past years. The shrinkage rate of construction for the public sector sat at approximately 5% annually from 2002 to 2004. Crucial for this was the financial situation at all levels of local governing bodies, which for years now has been strained.

The negative trend continued during the first half of this year. Construction work and services strongly decreased both in West Germany (-4.3%) and in East Germany (-6.7%), which was partly due to adverse weather conditions, a factor that usually affects the large sector of structural engineering most strongly. For the overall year 2005, a palpable slowdown of negative growth is to be expected. The re-allocation of funds to improve the financial situation of municipalities has gradually taken a favorable effect on the willingness and ability of municipalities to invest. This trend is also indicated by the stabilization of contracts awarded in the area of structural engineering projects for the public sector. It will be considerably stronger in West Germany, however, than in East Germany (cf. figure 2).

A noticeable improvement in the area of road construction can moreover be discerned when looking at contracts awarded to the construction industry proper; in this regard, East Germany is also benefiting from the more favorable development. The revenue generated by the toll levied on trucks and freight vehicles might contribute to this upward trend continuing into 2006. For the area as a whole of construction measures for the public sector, a smaller reduction (-1%) is to be anticipated for the coming year, with East Germany only marginally exceeding West Germany.

## Outlook

The construction industry has had to cope with a lengthy dry spell. Compared to the levels existing in 1995, the real construction volume, then at approximately euro 300 billion, has plummeted by about a quarter of its scope to approximately euro 220 billion in 2005.

For next year, a stabilization of demand in the construction sector is now finally in the offing. There will not be any perceptible growth yet, but the decline is anticipated at a mere 1%. Housing construction will remain the weakest sector for the time being. Impulses for growth will come from commercial construction, while the construction for the public sector looks set to consolidate.

Most recently, price development was characterized above all by the rise of costs of raw material and energy, yet in view of weak demand, prices increased only moderately. A slight leveling out is anticipated for 2006, with the level of construction prices being a good 1% higher than this year. Hence, the nominal construction volume, at euro 229 billion, will be roughly the same as it is in 2005.