NTC RESEARCH

JPMorgan Global PMI

3 October 2003

Report on Manufacturing and Services

Produced by JPMorgan and NTC Research in association with ISM and IFPMM

The JPMorgan Global PMI series is produced with NTC Research in association with ISM and IFPMM.

The Global PMI series provides the first indication each month of worldwide business conditions, based on data collected from around 10,000 companies.

Subscriptions to the Global PMI are available from NTC at www.ntc-research.com

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The International Federation of Purchasing and Materials Management is the union of 42 national purchasing associations worldwide. Within this circle, about 200,000 purchasing professionals can be reached.

Global economic growth at fastest pace since 2000

September purchasing managers' surveys from around the world signal robust growth in the global economy. JPMorgan's global all-industry output index, which spans the manufacturing and service sectors of the economy, climbed 0.2 points to 57.3 in September, the highest reading in three years.

The output index is consistent with robust, 4% saar* growth in global GDP. Global growth last topped 4% in the second quarter of 2000.

The global upturn is becoming more broad-based. Growth remains far stronger in the United States than in the other major economies. However, the pace of advance also is impressive in Japan, as well as the UK. Importantly, the PMIs show that the Eurozone economy has begun to accelerate, with positive contributions from both manufacturing and services in September.

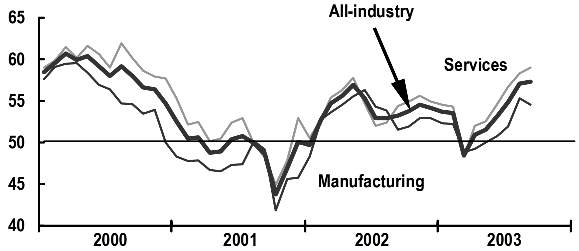
Notably, the pace of new orders growth also remained buoyant in September. However, the global orders index fell 1 point to 56.6 in September.

The September PMI survey showed no improvement in global labor market conditions. The global all-industry employment index came in at 48.8, similar to August's figure. Service sector employment appears stagnant, with continued job losses in the manufacturing sector.

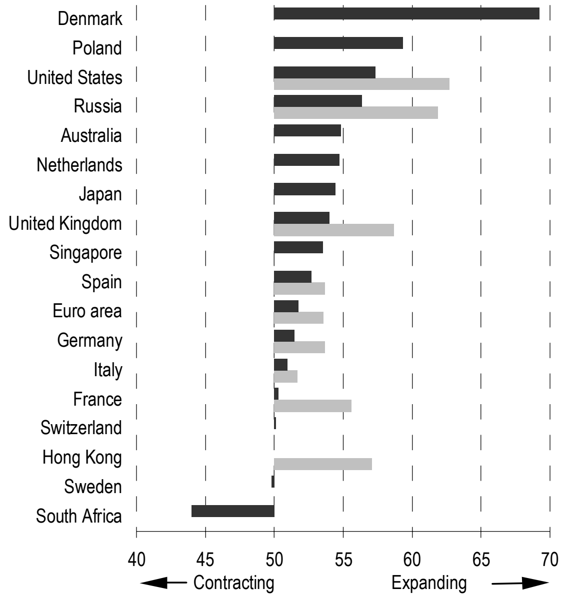
Firms continue to report relatively modest increases in input costs. The all-industry input price index held steady at 53.3 in September. The manufacturing input price index climbed back above the breakeven level, reflecting price increases in base metals and various other non-oil commodities.

* *seasonally adjusted annualised rate.*

JPMorgan global PMI output
DI, sa



Output PMIs by country in Sep 2003
DI, sa; black: manufacturing, grey: services



Global PMI summary

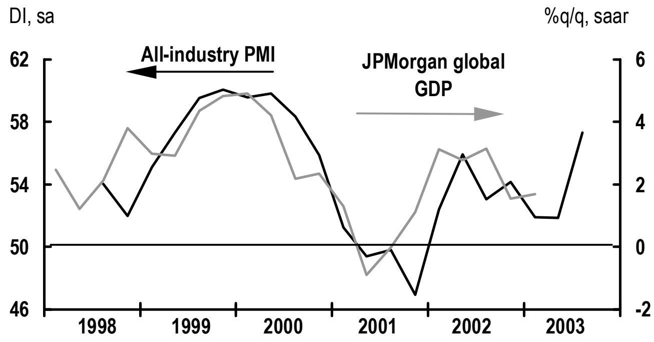
		May	Jun	Jul	Aug	Sep
Output	Total	51.5	53.1	54.8	57.1	**57.3**
	Manufacturing	50.0	50.8	52.0	55.3	**54.6**
	Services	52.6	54.6	56.7	58.3	**59.0**
New orders	Total	51.2	52.0	56.5	57.6	**56.6**
	Manufacturing	48.9	49.6	52.8	54.8	**56.3**
	Services	52.6	53.6	58.9	59.4	**56.8**
Employment	Total	48.3	48.3	48.4	49.0	**48.8**
	Manufacturing	45.4	46.8	46.7	47.6	**47.5**
	Services	50.1	49.2	49.5	50.0	**49.6**
Input prices	Total	50.7	50.8	50.5	53.3	**53.3**
	Manufacturing	50.5	50.4	48.0	49.5	**51.3**
	Services	50.8	51.1	52.1	55.8	**54.6**

Notes: data for Singapore relate to August. The Hong Kong PMI covers all sectors.

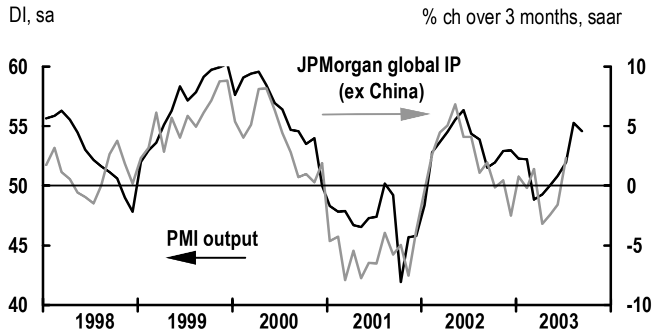
PMI component summary

- The **Global All-Industry Output Index** rose from 57.1 in August to 57.3 in September, indicating the strongest monthly increase of combined manufacturing and service sector output since September 2000. Output has now risen for six successive months, having contracted for one month back in March, with the rate of growth accelerating sharply over this period.
- Output growth in the service sector, which hit a three-year high in September, exceeded that of manufacturing for the sixth month in a row. In manufacturing, growth of output eased from a fourteen-month high in August, but remained strong by recent standards
- The **Global All-Industry New Business Index** signalled a fifth successive monthly rise in demand for goods and services in September, although the index fell from 57.6 to 56.6 to register an easing in the rate of increase compared to August. Nevertheless, growth over Q3 2003 has been stronger that at any time since late-2000. Services reported stronger growth of new business than manufacturing, though the growth differential was the narrowest since March.
- The **Global All-Industry Employment Index** signalled a decline in world-wide private sector employment for the thirty-second straight month in September. Although the rate of job losses has eased towards near-stagnation in recent months, employment fell at a slightly faster rate than in August. A marginal decline in service sector employment contrasted with a steeper rate of decline in manufacturing.
- At 53.3, the **Global All-Industry Prices Index** was unchanged from August. At a level well above 50.0, the index registered a significantly steeper rate of increase than the sixteen-month low seen in July. For the first time since June, costs rose in both manufacturing and services, mainly reflecting an upturn in global demand for commodities and still high oil prices.

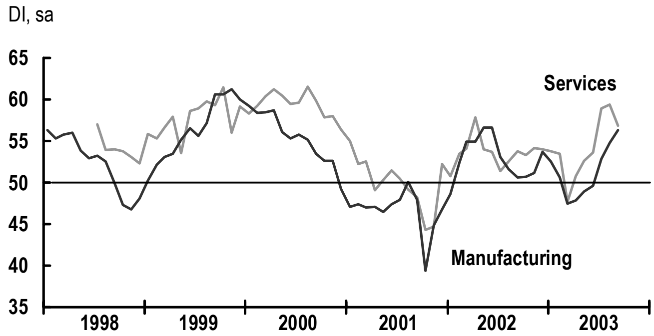
Global activity indicators



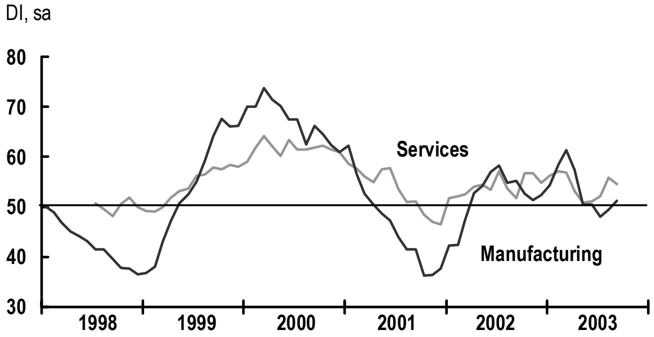
Global manufacturing output



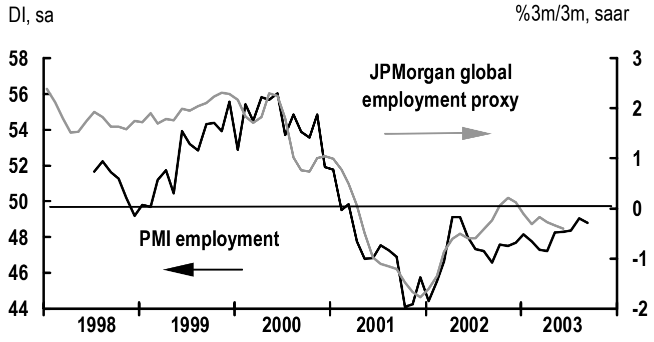
Global new orders



Global input prices



Global total employment



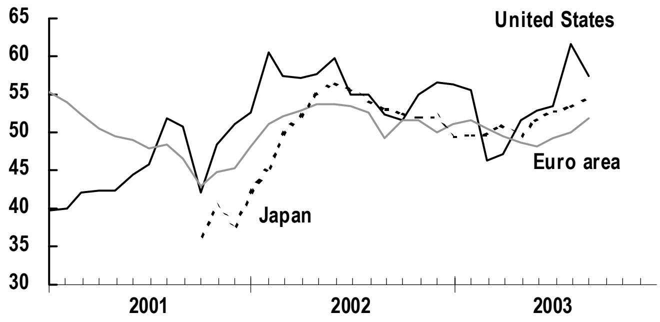
National PMI summary

Expansion recorded in US, Europe and Asia

- Widespread improvements in output levels were recorded around the world in September. In fact, the only PMI survey that failed to record an expansion of output was South African manufacturing.
- In the US, combined manufacturing and service sector output increased at a rapid pace in September, despite an easing in the pace of growth in manufacturing, which caused a moderation on the overall rate of expansion.
- In both the UK and Eurozone, combined manufacturing and service sector growth accelerated in September. Services showed particular strength in both cases. Eurozone growth was driven by a recovery in the German economy.
- Although seeing output increase for the second consecutive month (reflecting in part a return to growth of manufacturing production), growth in the Eurozone nevertheless continued to lag well behind that of the US, the UK and even Japan.
- Growth in Asia picked up in September, with Japanese manufacturing output expanding at the fastest pace for fourteen months and the Hong Kong economy expanding at the fastest rate for over three years. Growth of manufacturing output in Australia meanwhile accelerated for the third month running.

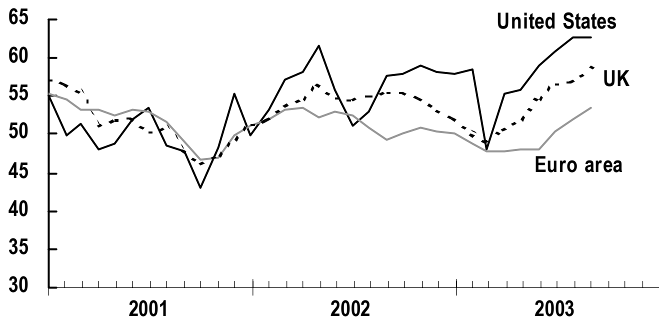
Manufacturing output PMIs

DI, sa



Services output PMIs

DI, sa



Regional PMI data summary

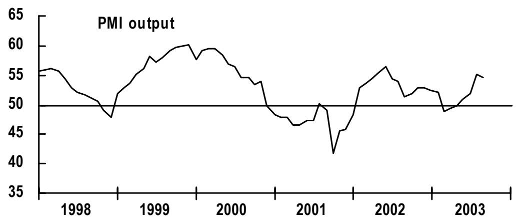
		OUTPUT					NEW ORDERS				
		May	Jun	Jul	Aug	Sep	May	Jun	Jul	Aug	Sep
United States	Total	54.9	57.7	59.4	62.4	61.6	56.3	56.8	63.6	63.7	59.0
	Manufacturing	51.5	52.9	53.3	61.6	57.3	51.9	52.2	56.6	59.6	60.4
	Services*	55.8	58.9	60.9	62.6	62.7	57.4	58.0	65.4	64.7	58.6
Euro area	Total	48.2	48.2	49.8	51.2	52.8	45.7	46.2	49.5	51.2	53.0
	Manufacturing	48.6	48.2	49.3	50.0	51.7	45.7	45.7	48.8	50.1	52.0
	Services	47.9	48.2	50.2	52.0	53.6	45.6	46.5	49.9	51.8	53.6
Japan	Manufacturing	49.4	51.5	52.8	53.5	54.4	48.7	51.1	52.2	54.8	56.2
United Kingdom	Total	51.4	53.6	55.8	56.8	57.4	52.1	53.5	55.2	56.5	58.0
	Manufacturing	50.1	51.2	53.4	56.2	54.0	50.5	51.1	53.0	53.8	56.3
	Services	51.9	54.5	56.6	57.0	58.7	52.7	54.3	56.0	57.5	58.6
Switzerland	Manufacturing	44.5	42.5	50.1	58.8	50.1	39.5	39.1	52.4	51.6	53.9
Russia	Total	60.6	60.0	61.3	63.5	60.7	60.6	60.2	61.6	63.4	60.7
	Manufacturing	56.3	56.6	57.1	56.4	56.3	58.2	58.3	58.2	57.0	55.3
	Services	61.8	61.0	62.5	65.5	61.9	61.3	60.7	62.5	65.2	62.3
Poland	Manufacturing	51.5	53.1	54.2	58.8	59.3	52.1	50.7	54.3	56.5	57.4
South Africa	Manufacturing	45.2	47.8	49.9	51.1	44.0	45.7	43.8	53.5	48.5	46.6
Hong Kong	Total	37.8	50.5	51.3	54.9	57.1	36.2	50.5	51.3	54.9	57.1
Singapore	Manufacturing	50.8	51.9	50.2	50.7	n/a	45.9	50.5	51.9	52.3	n/a
Australia	Manufacturing	53.8	50.2	52.3	54.5	54.8	51.8	49.8	51.9	48.5	52.4

* For the US, data for service industries are extracted from the ISM non-manufacturing survey in order to retain consistency with data for other countries.

Manufacturing summary

OUTPUT

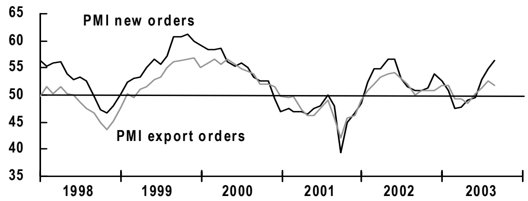
Global manufacturing output increased for the fourth month running. The rate of increase slipped from August's fourteen-month peak but remained high by recent standards. The principal cause of slower output growth was an easing in the rates of increase in the US and UK, but in both countries growth had been particularly strong in August. Growth picked up in Japan and the Eurozone.



	Output
Apr 03	49.2
May 03	50.0
Jun 03	50.8
Jul 03	52.0
Aug 03	55.3
Sep 03	54.6

NEW ORDERS

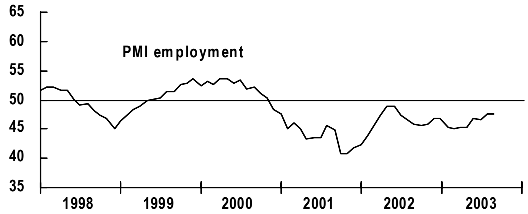
The **Global Manufacturing New Orders Index** continued to rise, increasing from 54.7 in August to 56.2. New orders have now risen for three successive months, with the rate of growth accelerating over this period to reach a fifteen-month peak in September. The improvement in demand was widely reported, with growth of order books rising in the US, Japan, Eurozone and the UK.



	New Orders
Apr 03	47.8
May 03	48.9
Jun 03	49.6
Jul 03	52.8
Aug 03	54.8
Sep 03	56.3

EMPLOYMENT

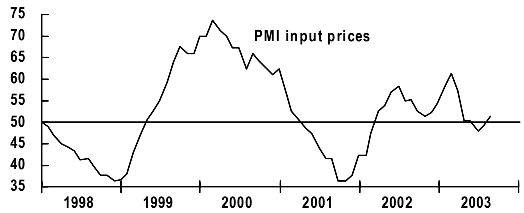
At 47.4, the **Global Manufacturing Employment Index** signalled a drop in staffing levels for the thirty-fourth straight month. Moreover, having eased over the previous five months, the rate of job losses picked up slightly in September as manufacturers continued to focus on boosting productivity in the face of strong competition.



	Employment
Apr 03	45.3
May 03	45.4
Jun 03	46.8
Jul 03	46.7
Aug 03	47.6
Sep 03	47.5

INPUT PRICES

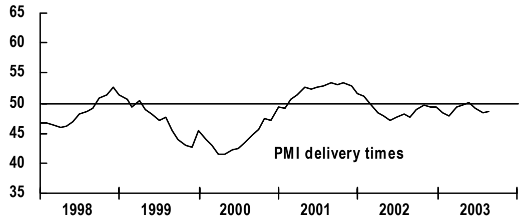
The **Global Manufacturing Input Prices Index** rose from 49.5 in August to 51.4 in September, moving above the 50.0 no change level to indicate the first increase in average raw material prices for three months. Although remaining only modest, the rate of increase was the strongest since April, when the rate of inflation was driven up by higher oil prices during the Iraq war.



	Input Prices
Apr 03	57.4
May 03	50.5
Jun 03	50.4
Jul 03	48.0
Aug 03	49.5
Sep 03	51.3

SUPPLIER DELIVERY TIMES

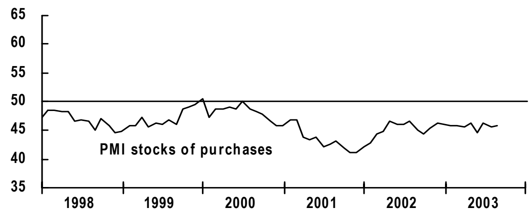
Having improved very marginally in June, average supplier lead-times around the world lengthened for the third month running in September. At 48.6, the **Global Manufacturing Suppliers' Delivery Times Index** signalled a lengthening of lead-times slightly less marked than in August. Delays were mainly caused by suppliers being busier as demand for raw materials picked up.



	Delivery times
Apr 03	49.4
May 03	49.5
Jun 03	50.2
Jul 03	49.2
Aug 03	48.5
Sep 03	48.6

STOCKS OF PURCHASES

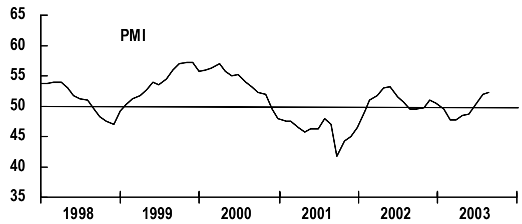
The **Global Manufacturing Stocks of Purchases Index** signalled a continuation to the trend of stock reduction that has been evident since the start of 2000. The index rose slightly on August, pointing to a slight easing in the rate of raw material inventory reduction. The steepest decline was recorded in the US, though stocks also fell in Japan, the UK and Eurozone.



	Inventories
Apr 03	45.5
May 03	46.3
Jun 03	44.7
Jul 03	46.3
Aug 03	45.5
Sep 03	45.8

MANUFACTURING PMI

The **Global Manufacturing PMI** – a composite indicator which provides an overall view of global manufacturing conditions – rose for the sixth straight month in September. At 52.3, the PMI has signalling an expansion of the manufacturing sector for three consecutive months (following five months of decline). The latest rate of increase was the fastest since June 2002.

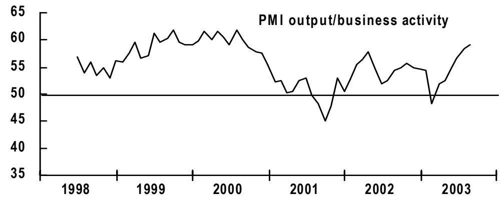


	PMI
Apr 03	47.8
May 03	48.5
Jun 03	48.9
Jul 03	50.4
Aug 03	52.0
Sep 03	52.3

Services summary

OUTPUT

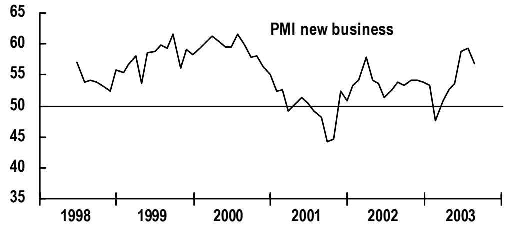
The **Global Services Business Activity Index** rose from 58.3 in August to 59.0 in September. Having contracted in March, due largely to uncertainty regarding the Iraq war, service sector activity has risen continually over the past six months with the rate of increase accelerating sharply over this period. Growth in September was the strongest since September 2000.



	Output
Apr 03	52.0
May 03	52.6
Jun 03	54.6
Jul 03	56.7
Aug 03	58.3
Sep 03	59.0

NEW ORDERS

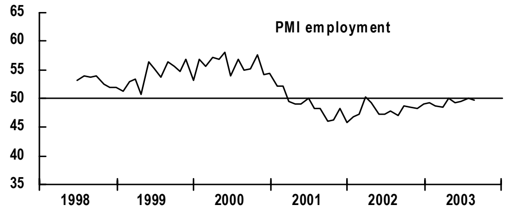
New business rose for the sixth month in a row, but the rate of increase eased from the near-three-year high seen in August. The **Global Services New Business Index** fell from 59.4 to 56.8. Although rising at a slower rate than in both August and July, the latest monthly rise was nevertheless the third strongest recorded since April of last year.



	New Orders
Apr 03	50.8
May 03	52.6
Jun 03	53.6
Jul 03	58.9
Aug 03	59.4
Sep 03	56.8

EMPLOYMENT

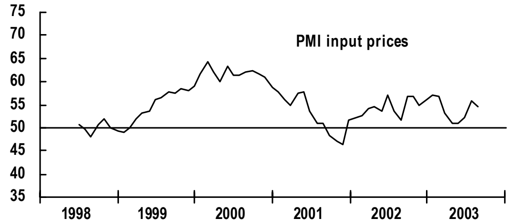
A world-wide reluctance to boost staffing levels was evident in September as the strength of the upturn in new business wavered. At 49.6, down from 50.0 in August, the **Global Services Employment Index** indicated a slight fall in staffing levels following stagnation in August. Employment has failed to show any significant growth over the past two-and-a-half years.



	Employment
Apr 03	48.5
May 03	50.1
Jun 03	49.2
Jul 03	49.5
Aug 03	50.0
Sep 03	49.6

INPUT PRICES

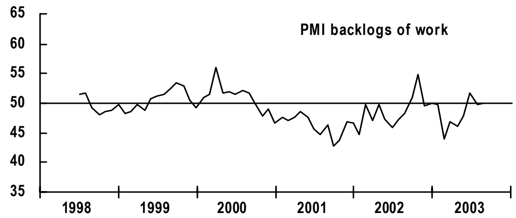
Average input costs rose for the twenty-first consecutive month in September. The **Global Services Input Prices Index** eased from August's five-month high of 55.8 but, at 54.6, continued to register a marked rate of growth of costs. Cost inflation has risen sharply since the recent low seen back in May largely due to a recovery of oil prices, which has pushed up fuel costs in many sectors.



	Input Prices
Apr 03	53.1
May 03	50.8
Jun 03	51.1
Jul 03	52.1
Aug 03	55.8
Sep 03	54.6

BACKLOGS OF WORK

At 50.0 in September, the **Global Services Backlogs of Work Index** indicated no overall change in the volume of work-in-hand. The index therefore points to the existence of few significant capacity constraints.



	Backlogs of work
Apr 03	46.8
May 03	46.1
Jun 03	47.8
Jul 03	51.6
Aug 03	49.7
Sep 03	50.0

Notes on data

Global Composite Indexes are calculated by taking a weighted average of the Global Manufacturing and Services Indexes shown on these pages, and in total cover countries which account for an estimated 76% of global output.

Global Manufacturing Indexes are based on the results of surveys carried out in the US, Japan, Germany, France, Spain, the UK, Italy, Ireland, Greece, Austria, the Netherlands, Poland, the Czech Republic, Russia, Sweden, Denmark, Singapore, Australia, South Africa, Hungary and Israel. These countries together account for an estimated 77% of global manufacturing output. The manufacturing survey data cover around 7,000 respondents. The data for each country are combined using weights determined by national contribution of manufacturing output to total global manufacturing output. The Global Manufacturing PMI is a composite index based on five of the individual manufacturing indexes with the following weights: New Orders - 0.3, Output - 0.25, Employment- 0.2, Suppliers' Delivery Times - 0.15, Stock of Purchases - 0.1, with the Delivery Times Index inverted so that it moves in a comparable direction.

Global Service Sector Indexes are based on the results of surveys carried out in the US, Germany, Italy, France, Spain, Russia, the UK and Ireland. Combined, these countries account for an estimated 56% of global private sector services output. The service sector survey data cover around 3,000 respondents. The data for each country are then combined using weights determined by national contribution of services output to total global services output.

Questions are asked about real events and are not opinion based. Data are presented in the form of diffusion indices, where an index reading above 50.0 indicates an increase in the variable since the previous month and below 50.0 a decrease.

About this report

The Global Report on Manufacturing and Services is produced by JPMorgan and NTC Research in association with ISM and IFPMM

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Data sources

Ranked by contribution to global GDP

Country	Producer	In association with
US	ISM	–
Japan	NTC	Reuters/Nomura/JMMA
Germany	NTC	BME/Reuters
France	NTC	CDAF/Reuters
UK	NTC	CIPS/Reuters
Italy	NTC	Reuters/ADACI
Spain	NTC	AERCE
Netherlands	NTC	NEVI/YACHT
Australia	AiG	PriceWaterhouseCoopers
Russia	NTC	Moscow Narodny Bank
Austria	NTC	BA Creditanstalt/OPWZ
Denmark	DILF	Danske Bank
South Africa	BER	IPSA/Investec
Poland	NTC	–
Hong Kong	NTC	–
Greece	NTC	HPI
Ireland	NTC	NCB Stockbrokers
Singapore	SIPMM	–
Israel	IPLMA	–
Czech Republic	NTC	–
Hungary	HALPIM	–
Switzerland	SVME	Credit Suisse

PMI surveys

The Global Report on Manufacturing and Services provides the first indication each month of global private sector business conditions, based on data collected from around 10,000 executives. It is compiled by NTC Research. The data enable decision makers in the financial world and in government to make better judgements much earlier than would otherwise be the case.

The wide coverage of the indexes, together with their speed of production, accuracy and direct comparability, make them unmatched as economic indicators. They provide truly "must have" information for financial institutions of all kinds and for major corporations world-wide.