



UNECE Weekly

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100,000 new robots were installed worldwide in 2004 ...

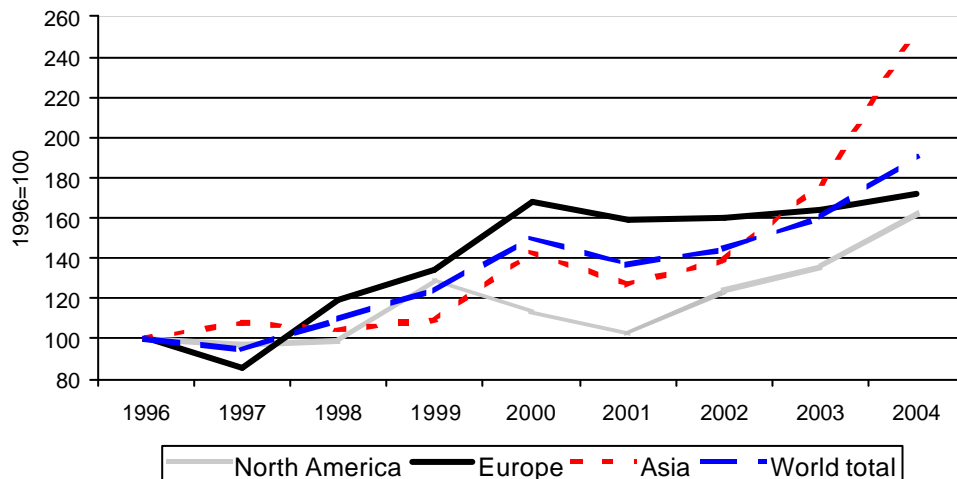
The UNECE, together with the International Federation of Robotics (IFR), regularly surveys the world robot market. In 2004, worldwide orders for industrial robots were 20% higher than in 2003. In Asia (heavily dominated by Japan and the Republic of Korea but also by a rapidly increasing market in China) they surged by 43%. Thereafter followed North America and Europe, with a 23% and 5% increase respectively. Never before have so many robots been ordered, worldwide as well as by the various regions: The UNECE estimates that at least 100,000 new robots will have been installed in 2004, of which 31,000 in the European Union (15% more than in 2003 but only 1% over the previous record in 2001), 16,100 in North America (27% more than in 2003 and 24% of the previous record in 2000); and 51,400 in Asia, mainly in Japan but with a rapidly increasing number in China (22% over 2003).



A central reason for the surge in robot investments is the fact that prices of robots are falling rapidly relative to labour costs. Expressed in constant 1990 US\$, robot prices in the year 2004 were on average 46% lower than in 1990. At the same time today's robots have a much higher performance than those produced in 1990 with respect to versatility, speed, accuracy, and above all computer power.

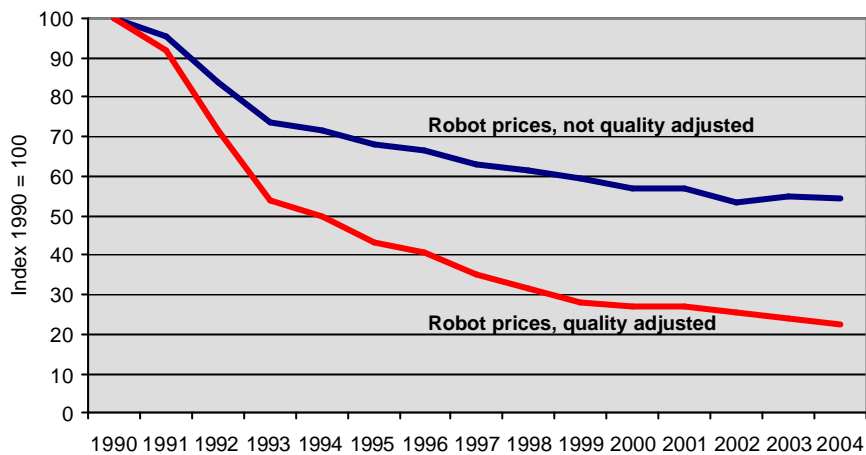
While prices of robots have plunged and quality has increased, labour costs have risen steadily. In the OECD area, labour compensation per employee in the business sector rose by over 100% in the period 1990-2004.

Index of order intake by region of customers, 1996=100



Note. Data for 2004 are preliminary for N. America and World total.
Sources: UNECE and IFR.

Price index of industrial robots for international comparison (based on 1990 \$ conversion rate), with and without quality adjustment



Source: UNECE and IFR

The prices of robots relative to labour compensation thus fell from 100 in 1990 to 27, when taking no consideration of performance improvements, and to 11 when calculating the effects of performance improvements. Rapidly falling relative prices of robots paired with a shrinking labour supply, in particular in the manufacturing sector, in the years ahead will spur continued high growth in robot investment. The first phase of the robotization drive mainly focused on the automotive industry, but 2004 data clearly show that the food industry and all other manufacturing industries, as well as many non-manufacturing sectors, are significantly stepping up their investment in robot systems.

For more information contact Jan Karlsson (jan.karlsson@unece.org)

Senate President Christian Poncelet to address the UNECE Forum on Entrepreneurship

Mr. Christian Poncelet, President of the Senate of the French Republic and a leading advocate of entrepreneurship and venture capital for economic growth in Europe, will address senior UNECE Government officials and corporate executives on the occasion of the UNECE Forum on Entrepreneurship, to be held at the Palais des Nations (Conference Room VII) on 10 February 2005 at 10 a.m.

For more information contact Sead Vilogorac (sead.vilogorac@unece.org)

Off the press...

UNECE Water Convention Guide now available in six languages

The guide explains how the Convention on the Protection and Use of Transboundary Watercourses and International Lakes helps countries to curb water pollution, restore and conserve water-related ecosystems, prevent conflicts over scarce resources, and ensure that international rivers are well managed so that future generations, too, will be able to extract clean water from them. The Convention was recently amended to enable UN Member States not members of the UNECE to sign up to it and benefit from the experience acquired in UNECE. To raise awareness about the Convention around the globe, this guide has been translated into all the official languages of the United Nations with the help of the Environment Ministries of Italy, Spain and Switzerland.

Copies in Arabic, Chinese, English, French, Russian and Spanish can be ordered free of charge from Rainer Enderlein (rainer.enderlein@unece.org) or Francesca Bernardini (francesca.bernardini@unece.org)



Coming up soon ...

February

- 9 Round Table on Corporate Governance
- 9 Meeting on Regulatory Framework for Internet-based Enterprise in the UNECE Region
- 10-11 Working Party on Industry and Enterprise Development

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