Statistics in focus

ECONOMY AND FINANCE

THEME 2 – 39/1999

CURRENCY AND FINANCE

Contents

The yield curve on the Eurostat Web site....2

The CIRR curve....4

The national curves....5

Bond indices....6

Conclusion....7

Information for readers....7

Manuscript completed on: 28/10/1999
ISSN 1024-4298
Catalogue number: CA-NJ-99-039-EN-I
Price in Luxembourg per single copy (excl. VAT): EUR 6

The euro yield curves

Luca Ascoli

In this statistical study, Eurostat presents in detail the new methodology for the calculation of the euro yield curve. The objective of this study is to make comprehensible to the reader the series of different yield curves calculated by Eurostat, to explain their interest and to compare it to other measurement methods, such as bond indices.

The creation of the euro-zone and the introduction of the new single currency have transformed European financial markets. The market in euro-denominated bonds has become the second largest worldwide after that in dollar bonds. To cater to the new situation, Eurostat has replaced the ECU yield curve, which was its reference tool for the ECU bond market, with the euro yield curve.

At the same time, Eurostat has established a yield curve for commercial interest reference rates for export credits and also national yield curves. These national yield curves have initially been created only for internal use by the European Commission but a larger use is taken in consideration.

Yield curves are one way of reproducing the situation of a bond market in graphic form. An alternative is to show the bond indices recording the market's performance. Some of the major credit institutions have chosen to calculate bond indices on a daily basis. The better known of these are presented at the end of the paper.

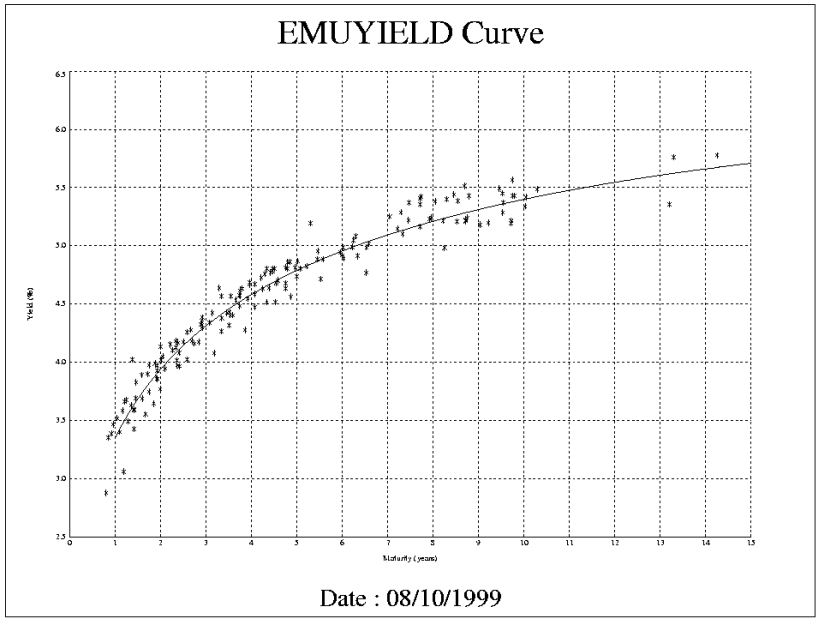

Figure 1: The euro yield curve

The curve in Figure 1 shows the yield structure for maturities of one to fifteen years.

The yield curve on the Eurostat Web site

Since September 1992, Eurostat had calculated an ECU yield curve[1] as a benchmark for the financial markets, and for a discerning public looking for information on yield developments on the ECU bond market. From June 1997 to the end of December 1998, four pages of the Eurostat Web site (http://europa.eu.int/en/comm/eurostat) were dedicated to this curve.

In response to the changeover of the financial markets to the euro, the ECU yield curve on the Web site was replaced with a euro yield curve on 5 January 1999. The new curve is very similar to its predecessor, although it has undergone a number of changes to better reflect the new situation on the bond market.

Since the euro replaces not only the ECU, but also all the national currencies of the euro-zone, the euro bond market has quickly become more liquid and deeper than that of the ECU. The new curve is therefore no longer calculated on the basis of a more-or-less fixed basket of around 20 bonds, but on a flexible basket of more than 200 bonds.

ISMA data

Every working day at around 11 p.m., ISMA (International Securities Market Association) in London issues a data file on the euro bonds which have been actively traded during that day on the major stock exchanges. The ISMA file often has more than 350 entries, but this number can vary slightly depending on stock exchange activity. In creating the file, ISMA makes a preselection of bonds: the minimum amount of each bond must be € 500 million, and only straight fixed-coupon bonds are included. No adjustments are made for differences in coupon levels or for differences in taxation and regulation between the capital markets.

Each entry contains the following data on a particular euro bond:

- ISIN code
- name of the issuer
- sector code of the issuer
- nationality code of the issuer
- amount of issue (outstanding)
- coupon
- date of payment
- maturity date
- buying rate
- selling rate
- remaining time to maturity
- yield to maturity
- Standard & Poor's credit rating
- Moody's credit rating.

To a certain extent (because of preselection), the ISMA file reflects the current makeup of the euro bond market.

For example, in the file of 8 October 1999, more than 90% of the bonds measured in terms of amount outstanding are issued by a government, less than 2% by international institutions, and the rest by non-financial enterprises and financial institutions.

The percentages change considerably when calculated in terms of the number of issues. More than 59% of bonds are then issued by governments, around 27% by financial institutions, slightly more than 6% by international institutions, and the remaining 8% by businesses. In other words, government issues are many in number and often much greater in volume than other issues.

A breakdown by country of government bonds measured in terms of volume (see Figure 2) reveals Italy as the largest issuer, followed by Germany and France. When all the issuing institutions are included, Germany comes first, followed by Italy and France. A comparison of the volume and the number of government issues by country shows that smaller issuing States, such as Austria, Finland and Portugal, have a higher percentage in number than in volume; for the larger issuing States, the opposite is true.

A breakdown by maturity of government bonds in terms of volume shows that a third of the bonds reach maturity after three years or less, more than

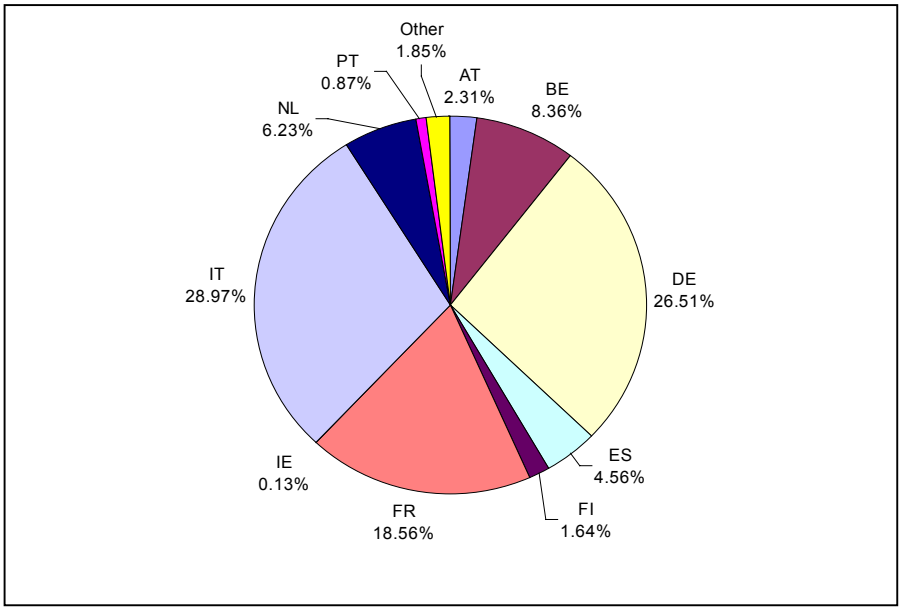

Figure 2 : Breakdown of government bonds by country based on ISMA data on 8 October 1999

[1] *See ECUSTAT supplement 9/1996*

half reach maturity after five years or more, and almost 90% reach maturity after ten years or less.

The calculation procedure

The file is retrieved automatically from the "Stadium" computer and imported to a FAME environment, where it is then processed. It takes approximately four minutes to update the FAME database and calculate and print all the curves. A further three minutes is then needed to create all the Web pages (tables and graphics) in the three languages and transfer them to the "buffer" site, so that they can be incorporated in the hourly update of the "Europa" site.

The first process run on the file involves a more stringent selection than that of ISMA and only the best bonds of the euro-zone are included. Only bonds meeting the following criteria are incorporated in the calculation of the yield curve.

- The sector code must identify the bond as a government issue to guarantee its quality.
- The nationality code must belong to one of the euro-zone countries.
- The bid-offer spread must not exceed 40 basis points (bp). The narrower the spread, the more liquid the bond. If the bid-offer spread does not exceed 40 bp, the bond can be considered to be very liquid.
- The time remaining to maturity must be least nine months, otherwise the yield would reflect the currency market and not the bond market.

The selection process filters out between 40% and 55% of the bonds because they do not meet the required conditions. The bonds are weighted by the amount outstanding to take into account the weight of each bond on the market.

Selection example

To return to the example of the file of 8 October 1999, 153 bonds out of 375 were rejected because their sector code was not that of a government issue, 25 because the issuer was outside the euro-zone, 7 because the bid-offer spread was greater than 40 bp and 11 because the remaining maturity was less than nine months. In total, 196 bonds out of 375 were rejected. Some failed to meet more than one criterion. There is a link between the nationality of the issuer and the sector code and liquidity. Euro-zone issues and government issues are often more liquid than other issues.

The model

The model used is transparent, reproducible and based on reliable data provided by ISMA. Since the results achieved with the calculation model chosen for the ECU yield curve were good, it has been used as a basis for the model for the euro yield curve. The number of very high-quality bonds has risen considerably compared with the situation before the introduction of the euro. The selection prior to the calculation ensures the quality of the bonds used, and the model therefore no longer needs to incorporate a quality variable.

$$R = c_0 + c_1 \log_{10}(M) + c_2 (\log_{10}(M))^2 + c_3 (\log_{10}(M))^3 + c_4 \{\log_{10}(\max(1, M/5))\}^3 + c_5 \{\log_{10}(\max(1, M/10))\}^3$$

$$[0{,}75 < M < 15]$$

R = Yield $\quad$ M = Maturity $\quad$ c_i = Coefficients

Figure 3: The yield curve equation

The yield curve is estimated using "spline" regression based on third-degree polynomial functions with the help of a standard Ordinary Least Square (OLS) technique. Spline regression was chosen because its flexibility makes it possible to create a curve which faithfully reflects the behaviour of a yield curve. Since a yield curve behaves differently in each maturity segment, the range of maturities has been divided into several sections, with a separate polynomial being adjusted to each of them; at the same time, their continuity and the smooth transition between them (in other words, the continuity of the first and second derivatives) remain unaffected. A system of three sections and two intersections (or "knot-points") was chosen. The "knot-points" were set at five years and ten years. Since there is a higher concentration of bond issues between one and five years, the yield curve is not based on the maturity, but on its logarithm. The logarithmic version provides a smoother issue distribution along the X-axis and makes the curve more flexible where necessary.

Every working day, the model calculates the one- to 15-year yields and the five coefficients of the equation using FAME's FIT command. These coefficients can be used to obtain the daily yield for any maturity.

The Eurostat Web site also provides users with information on the behaviour of the curve in terms of yields, term spread and volatility.

The CIRR curve

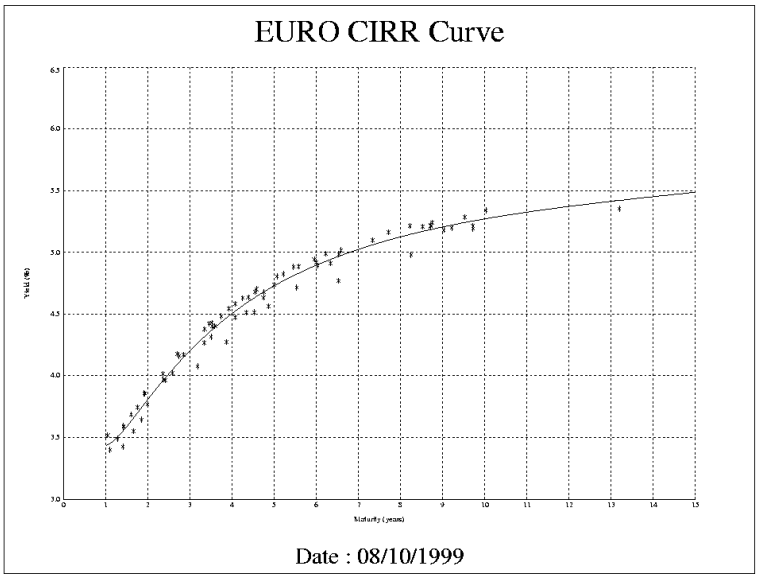

Figure 4: The CIRR curve

The commercial interest reference rates (CIRR) are the minimum rates that can be applied to export by national export credit agencies under the OECD Arrangement on Export Credits.

In general, they are calculated by adding 100 basis points (= one percentage point) to the state-borrowing rate of the country concerned. The CIRRs are used for medium- and long-term credit for sales of aeroplanes, nuclear power stations, very large industrial machinery, etc.

Until the end of December 1998 there was a CIRR rate for the ECU and for each national currency of the future euro-zone (except for the Portuguese escudo and the Luxembourg franc). Since the introduction of the euro, there has been a single CIRR euro-rate for the whole euro-zone.

The calculation

The calculation used is based on a similar model to that of the curve on the Web site. An iterative algorithm has been added to the model to calculate the minimum rates. Based on the same ISMA file, the data have undergone the same selection process, but the regression for the calculation of the curve is not carried out in a single step. The program calculates the standard deviations of the observations used for the regression. It finds the one with the highest standard deviation, removes it and starts a new regression process with the remaining bonds. The removed bond is always the one highest above the last curve calculated. Before each regression, the volume of the bond market is measured. The algorithm stops just before the market volume of the remaining bonds dips below 50%. In this way, the calculation of this curve will have used at least half the government bonds on the market. Because of the iterative algorithm, the CIRR curve is lower than that of the Web site.

Since the CIRR rates are monthly, they are based on a weighted monthly average (the last week counts double).

Every day, Eurostat sends the yields from the calculation of the CIRR curve to the DG for Trade in Brussels, which uses them to calculate the rates to be applied. The application period of these rates always covers the second half of the current month and the first half of the following month. The announced rates are always calculated on the basis of the yields observed during the previous month.

Period	≤ 5 years	≥ 5 years ≤ 8.5 years	≥ 8.5 years
15/01/99–14/02/99	4.15	4.33	4.53
15/02/99–14/03/99	4.07	4.28	4.48
15/03/99–14/04/99	4.14	4.41	4.67
15/04/99–14/05/99	4.15	4.50	4.80
15/05/99–14/06/99	3.93	4.28	4.58
15/06/99–14/07/99	3.96	4.34	4.69
15/07/99–14/08/99	4.27	4.74	5.11
15/08/99–14/09/99	4.60	5.11	5.43
15/09/99–14/10/99	4.86	5.37	5.65
15/10/99–14/11/99	5.03	5.51	5.81

Table 1: The current CIRRs

The rates in Table 1 can also be found on the Web site of the DG for Trade: http://europa.eu.int/comm/dg01/cirr.htm.

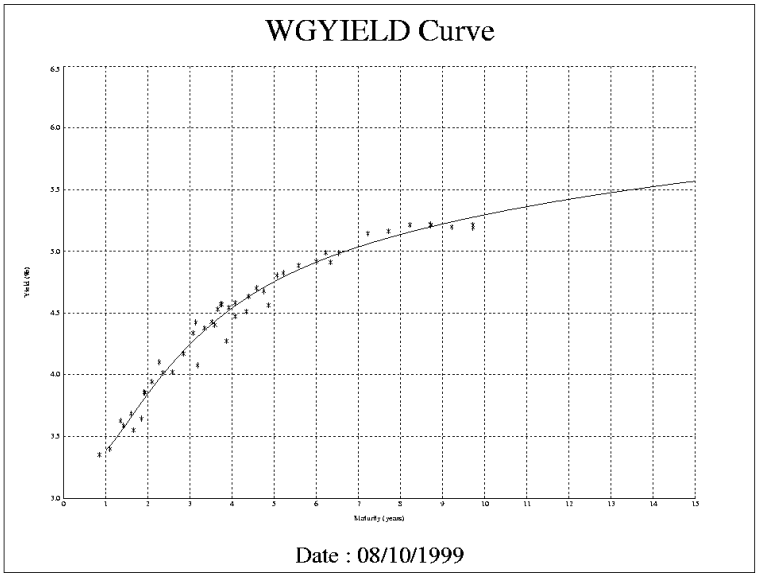

Figure 5: German yield curve

Eurostat has also created national curves, principally for internal use at the European Commission.

Even since the introduction of the euro, the size and liquidity of the national bond markets in the euro-zone have differed widely from one country to another. Italy has become the largest issuer of government bonds in the euro-zone in terms of number and issue volume, with Germany in second place. Together, these two countries issue more than half the government bonds in the euro-zone. However, the euro bond market has become the most harmonised financial market. Most of the various institutions have taken advantage of the redenomination of their debt in euro to choose the same calculation rules. For example, the rule most often used for interest is "actual/actual[2]". The market has therefore become more homogeneous. However, since the GDP and debt of smaller countries will always be lower in real terms, their issues will not have the same liquidity as those of larger countries. The volume of government bonds in the euro-zone should not increase too much in the next few years, since all States are now bound by the Stability and Growth Pact, limiting their deficit to 3% of GDP (reference value). Since the arrival of the single currency, the smaller countries have been issuing higher volumes in euro, even if they cannot issue them for each maturity and thus cover the entire yield curve. Eurostat cannot yet calculate a yield curve for some of the States which make few issues. This is the case with Austria, Finland, Ireland, Luxembourg and Portugal. In addition, a calculation is not always possible for Spain, since a regression curve requires a minimum of points well spread between the various maturities.

By contrast, the proportion of bonds issued by businesses and the financial sector will continue to increase, because the European bond market has become more attractive now that it is deeper and more liquid[3]. In 1997, 74% of EU businesses were financed by bank loans, and only 26% by bond issues[4]. At the same time in the United States 68% of businesses relied on the bond market to borrow funds.

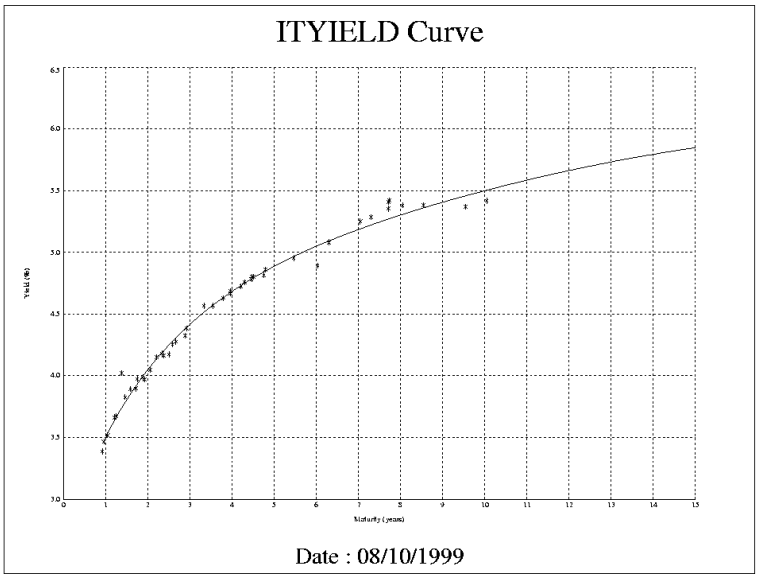

Figure 6: Italian yield curve

[2] *"Kapitalmarkt Europa: Der Bund zieht mit", Hans Ulrich Lellek, Börsen-Zeitung, 25 September 1999*

[3] *"Bond issuance beats record", Edward Luce, Financial Times, 1 October 1999*

[4] *"Practical issues arising from the euro", Bank of England, June 1999*

This observation also applies to the debts of local administrations and, to a lesser extent, the debts of the States[5].

The calculation model used for national curves is the same as that of the yield curve on the Eurostat Web site. However, for certain countries, such as the Netherlands, a third-degree polynomial regression without the "knot-points" at five and ten years was found to produce better results.

The national curves have become very similar due to the convergence in yields. For example, a comparison of the German curve and the Italian curve shows very little difference in basis points. The yield differential between a German government issue at ten years and a comparable Italian bond varied between 20 and 30 bp during the first quarter of 1999[6]. In this case, the residual discrepancy is due to the difference in credit risk, which is also reflected in the countries' credit rating. The rating agency Standard & Poor's gives Germany the best credit rating, triple A (AAA), and Italy the rating AA. This means that Italy must pay more to borrow on the market. Thanks to the introduction of the euro and the consolidation programmes of the State budgets, the already slight differences in credit risk should disappear at State level.

Bond indices

A number of financial establishments calculate bond indices for the euro-zone on a daily basis. The bond indices presented here have been chosen because of their importance. In cases where an establishment calculates several indices, that of government bonds has been preferred, since it is close to the calculation of the yield curve.

Barclays Capital Euro Government Bond Indices

Barclays Capital publishes a number of indices based on public issues. There is an index for each country of the euro-zone (except Luxembourg) and an index covering the entire euro-zone (Euro all). In addition to all these indices, there are data for different maturity periods. Barclays Capital limits itself to the euro-zone; there is no index covering the European Union.

These indices are calculated on the basis of liquid, negotiable, fixed-coupon bonds with a remaining term to maturity of more than one year and a minimum volume of € 250 million.

They are weighted by stock-market capitalisation in euro (in ECU before 1 January 1999) and based on FTSE actuarial methods with monthly changes to the weightings. The base 100 is 31 December 1997.

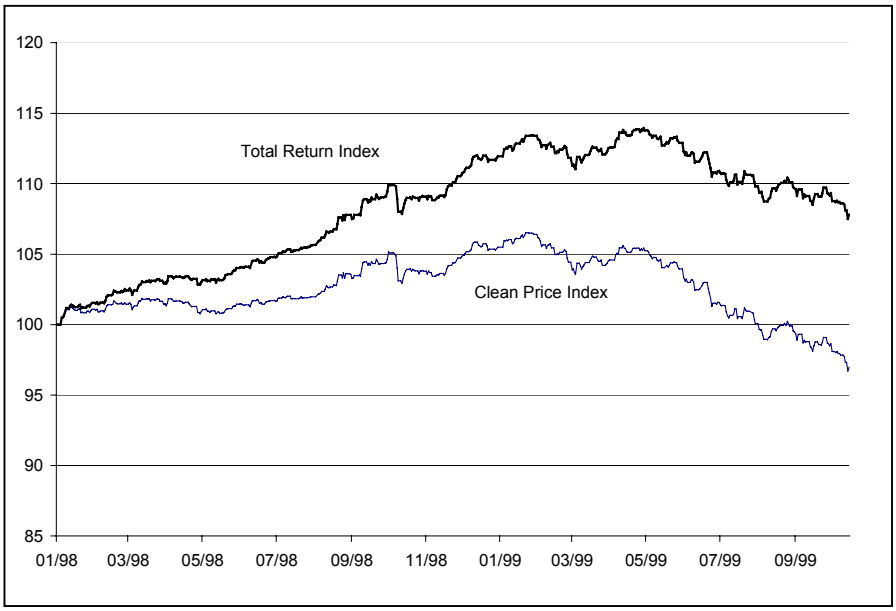

Figure 7: Barclays Capital Euro Government Bond Indices (Euro all)

In the example of 15 October 1999, 269 bonds are included in the calculation of the "Euro all" index, with a stock-market capitalisation of around € 2 000 billion. The breakdown by country is as follows: Austria 2.50%, Belgium 7.15%, Germany 24.01%, Spain 8.27%, Finland 1.77%, France 21.49%, Ireland 0.83%, Italy 25.04%, Netherlands 7.68%, Portugal 1.27%.

When this is compared with the data used the same day for the euro yield curve, the result is as follows: 214 shares with a total stock-market capitalisation of more than € 1 700 billion were selected for the calculation. The breakdown by country is as follows: Austria 1.92%, Belgium 8.70%, Germany 27.56%, Spain 9.13%, Finland 1.20%, France 19.55%, Ireland 0.12%, Italy 23.76%, Netherlands 7.29%, Portugal 0.86 %.

[5] *"Staatsfinanzierung", DePfa Research, Nr. 3/1999*

[6] *"Klare Konturen des neuen Euro-Kapitalmarkts", Thomas Stucki, Neue Züricher Zeitung, 24 August 1999*

Barclays Capital is based on a wider selection of bonds to allow smaller countries to be included in the indices. Liquidity is guaranteed only by a minimum size. The main aim of these indices is to draw a representative picture of the government euro bond market of the countries in the euro-zone. By contrast, the aim of the yield curve is to show the yields of the best government bonds.

Figure 7 shows the Total Return Index, which includes the revenue reinvested as soon as it is received, and the Clean Price Index, which is based on the prices at closure without accrued interest.

MSCI
EMU 11 Sovereign Debt Index

Morgan Stanley Capital International has created an index (MSCI EMU 11 Sovereign Debt Index) to cover the sovereign debt issued on the national markets of the euro-zone countries. This index is based only on fixed-rate issues and includes both simple issues and issues with "put" or "call" options. The minimum remaining maturity is one year. The minimum stock issued depends on the market. It is € 1 500 million for France, Germany, Ireland, Italy, the Netherlands and Spain, and only € 1 000 million for Austria, Belgium, Finland and Portugal. The breakdown by country is therefore as follows: Austria 2.54%, Belgium 7.42%, Germany 23.76%, Spain 9.18%, Finland 1.86%, France 22.29%, Ireland 0.90%, Italy 23.46%, Netherlands 7.35%, Portugal 1.23%. The index is calculated from around 300 shares weighted by the stock-market capitalisation. Its makeup is reviewed every month.

JP Morgan
Government Bond Indices

In March 1998, JP Morgan published the EMU Government Bond Index to measure the performance of the bond market in the future euro-zone. This index is made up of 229 fixed-coupon government bonds representing a stock-market capitalisation of approximately € 1 900 billion. The bonds must meet the JP Morgan liquidity criterion, which varies according to the size of the country's market. It is stricter for the larger, more liquid markets, so that they do not prevail over the smaller, less liquid markets. It currently covers all euro-zone countries except Luxembourg and Austria. The index base was initially 31 December 1995, but was then changed to 31 December 1998 = 100. The national weightings are as follows: Belgium 8.31%, Germany 26.27%, Spain 9.81%, Finland 1.89%, France 24.57%, Ireland 1.29%, Italy 17.19%, Netherlands 9.63%, Portugal 1.04%.

Compared with the two other indices, JP Morgan's EMU Government Bond Index is more representative of France than Italy. This means that quality is more important than volume and the number of issues in the choice of bonds.

JP Morgan later created a second European index called the European Government Bond Index. This covers EU 15 except for Austria, Finland, Greece, Ireland, Luxembourg and Portugal, and is based on 253 fixed-coupon government bonds.

Conclusion

Bond markets are less "exciting" than share markets but attract investors looking for safer investments in times of uncertainty. The introduction of the euro has made the European bond market a lot larger and more attractive to foreign investors.

This development has not run its course, but is part of an ongoing trend. For all these reasons, analysis of the euro bond market by means of yields or indices can be very interesting.

Information for readers

The daily yields indicated by the euro yield curve and the monthly and quarterly yields are available from the New Cronos database for maturities from one to 15 years. These yields are calculated for the euro-zone and for EU 15.

The monthly yields for the euro-zone and EU 15 for maturities of one, five and ten years are posted on the euro-indicator Web page at the start of each month.

Further information:

➢ **Reference publications**

Title Money, Finance and the Euro: Statistics
Catalogue No CA-DQ-99-00*-3A-C Price EUR 15

➢ **Databases**

New Cronos
Domain MNY

To obtain information or to order publications, data bases and special sets of data, please contact the **Data Shop** network:

BELGIQUE/BELGIË

Eurostat Data Shop
Bruxelles/Brussel
Chaussée d'Etterbeek 13
Etterbeeksesteenweg 13
B-1049 BRUXELLES / BRUSSEL
Tel. (32-2) 299 66 66
Fax (32-2) 295 01 25
E-Mail:
datashop.brussels@eurostat.cec.be

DANMARK

DANMARKS STATISTIK
Bibliotek og Information
Eurostat Data Shop
Sejrøgade 11
DK-2100 KØBENHAVN Ø
Tel. (45-39) 17 30 30
Fax (45-39) 17 30 03
E-Mail: bib@dst.dk

DEUTSCHLAND

STATISTISCHES BUNDESAMT
Eurostat Data Shop Berlin
Otto-Braun-Straße 70-72
D-10178 BERLIN
Tel. (49-30) 23 24 64 27/28
Fax (49-30) 23 24 64 30
E-Mail:
datashop@statistik-bund.de

ESPAÑA

INE Eurostat Data Shop
Paseo de la Castellana, 183
Oficina 009
Entrada por Estébanez Calderón
E-28046 MADRID
Tel. (34-91) 583 91 67
Fax (34-91) 579 71 20
E-Mail: datashop.eurostat@ine.es

FRANCE

INSEE Info Service
Eurostat Data Shop
195, rue de Bercy
Tour Gamma A
F-75582 PARIS CEDEX 12
Tel. (33-1) 53 17 88 44
Fax (33-1) 53 17 88 22
E-Mail: datashop@insee.fr

ITALIA – Roma

ISTAT
Centro di Informazione Statistica
Sede di Roma, Eurostat Data Shop
Via Cesare Balbo, 11a
I-00184 ROMA
Tel. (39-06) 46 73 31 02/06
Fax (39-06) 46 73 31 01/07
E-Mail: dipdiff@istat.it

ITALIA – Milano

ISTAT
Ufficio Regionale per la Lombardia
Eurostat Data Shop
Via Fieno 3
I-20123 MILANO
Tel. (39-02) 65 95 133/134
Fax (39-02) 65 30 75
E-mail: mileuro@tin.it

LUXEMBOURG

Eurostat Data Shop Luxembourg
BP 453
L-2014 LUXEMBOURG
4, rue A. Weicker
L-2721 LUXEMBOURG
Tel. (352) 43 35 22 51
Fax (352) 43 35 22 221
E-Mail: dslux@eurostat.datashop.lu

NEDERLAND

STATISTICS NETHERLANDS
Eurostat Data Shop-Voorburg
po box 4000
2270 JM VOORBURG
Nederland
Tel. (31-70) 337 49 00
Fax (31-70) 337 59 84
E-Mail: datashop@cbs.nl

NORGE

Statistics Norway
Library and Information Centre
Eurostat Data Shop
Kongens gate 6
P. b. 8131, dep.
N-0033 OSLO
Tel. (47-22) 86 46 43
Fax (47-22) 86 45 04
E-Mail: datashop@ssb.no

PORTUGAL

Eurostat Data Shop Lisboa
INE/Serviço de Difusão
Av. António José de Almeida, 2
P-1000-043 LISBOA
Tel. (351-21) 842 61 00
Fax (351-21) 842 63 64
E-Mail: data.shop@ine.pt

SCHWEIZ/SUISSE/SVIZZERA

Statistisches Amt des Kantons
Zürich, Eurostat Data Shop
Bleicherweg 5
CH-8090 Zürich
Tel. (41-1) 225 12 12
Fax (41-1) 225 12 99
E-Mail: datashop@zh.ch
Internetadresse:
http://www.zh.ch/statistik

SUOMI/FINLAND

Eurostat Data Shop Helsinki
Tilastokirjasto
Postiosoite: PL 2B
Käyntiosoite: Työpajakatu 13 B, 2 krs
FIN-00022 Tilastokeskus
Tel. (358-9) 17 34 22 21
Fax (358-9) 17 34 22 79
S-posti datashop.tilastokeskus@tilastokeskus.fi
Internetadresse:
http://www.tilastokeskus.fi/tk/kk/datashop.html

SVERIGE

STATISTICS SWEDEN
Information service
Eurostat Data Shop
Karlavägen 100 - Box 24 300
S-104 51 STOCKHOLM
Tel. (46-8) 50 69 48 01
Fax (46-8) 50 69 48 99
E-Mail: infoservice@scb.se
URL: http://www.scb.se/info/datashop/eudatashop.asp

UNITED KINGDOM

Eurostat Data Shop
Enquiries & advice and publications
Office for National Statistics
Customers & Electronic Services Unit
1 Drummond Gate - B1/05
UK-LONDON SW1V 2QQ
Tel. (44-171) 533 56 76
Fax (44-1633) 812 762
E-Mail: eurostat.datashop@ons.gov.uk

UNITED KINGDOM

Eurostat Data Shop
Electronic Data Extractions, Enquiries & advice - R.CADE
Unit 1L Mountjoy Research Centre
University of Durham
UK - DURHAM DH1 3SW
Tel: (44-191) 374 7350
Fax: (44-191) 384 4971
E-Mail: r-cade@dur.ac.uk
URL: http://www-rcade.dur.ac.uk

UNITED STATES OF AMERICA

HAVER ANALYTICS
Eurostat Data Shop
60 East 42nd Street
Suite 3310
USA-NEW YORK, NY 10165
Tel. (1-212) 986 93 00
Fax (1-212) 986 58 57
E-Mail: eurodata@haver.com

Media Support Eurostat (for professional journalists only).
Bech Building Office A3/48 • L-2920 Luxembourg • Tel. (352) 4301 33408 • Fax (352) 4301 32649 • e-mail: media.support@cec.eu.int

For information on methodology

Luca Ascoli, Eurostat/B4, L-2920 Luxembourg, Tel: (352) 4301 32707, Fax : (352) 4301 32929, e-mail : Luca.ASCOLI@cec.eu.int

Eurostat would like to thank Gesina Dierickx for her work on this document.
ORIGINAL: French

Please visit our web site at **http://europa.eu.int/eurostat.html** for further information!

A list of worldwide sales outlets is available at the **Office for Official Publications of the European Communities**.

2 rue Mercier – L-2985 Luxembourg
Tel. (352) 2929 42118 Fax (352) 2929 42709
Internet Address **http://eur-op.eu.int/fr/general/s-ad.htm**
e-mail: info.info@cec.eu.int

BELGIQUE/BELGIË – DANMARK – DEUTSCHLAND – GREECE/ELLADA – ESPAÑA – FRANCE – IRELAND – ITALIA – LUXEMBOURG – NEDERLAND – ÖSTERREICH PORTUGAL – SUOMI/FINLAND – SVERIGE – UNITED KINGDOM – ÍSLAND – NORGE – SCHWEIZ/SUISSE/SVIZZERA – BALGARIJA – CESKÁ REPUBLIKA – CYPRUS EESTI – HRVATSKA – MAGYARORSZÁG – MALTA – POLSKA – ROMÂNIA – RUSSIA – SLOVAKIA – SLOVENIA – TÜRKIYE – AUSTRALIA – CANADA – EGYPT – INDIA ISRAËL – JAPAN – MALAYSIA – PHILIPPINES – SOUTH KOREA – THAILAND – UNITED STATES OF AMERICA

Order form

I would like to subscribe to Statistics in focus (from 1.1.1999 to 31.12.1999):
(for the Data Shop and sales office addresses see above)

❒ **Formula 1**: All 9 themes (approximately 90 issues)

- ❒ Paper: 360 EUR
- ❒ PDF: 264 EUR
- ❒ Paper + PDF: 432 EUR

Language required: ❒ DE ❒ EN ❒ FR

❒ **Formula 2:** One or more of the following seven themes:

- ❒ Theme 1 'General statistics'
  ❒ Paper: 42 EUR ❒ PDF: 30 EUR ❒ Combined: 54 EUR
- ❒ Theme 2 'Economy and finance'
- ❒ Theme 3 'Population and social conditions'
- ❒ Theme 4 'Industry, trade and services
- ❒ Theme 5 'Agriculture and fisheries'
- ❒ Theme 6 'External trade'
- ❒ Theme 8 'Environment and energy
  ❒ Paper: 84 EUR ❒ PDF: 60 EUR ❒ Combined: 114 EUR

Language required: ❒ DE ❒ EN ❒ FR

❒ Please send me a free copy of 'Eurostat Mini-Guide' (catalogue containing a selection of Eurostat products and services)
Language required: ❒ DE ❒ EN ❒ FR

❒ I would like a free subscription to 'Statistical References', the information letter on Eurostat products and services
Language required: ❒ DE ❒ EN ❒ FR

❒ Mr ❒ Mrs ❒ Ms
(Please use block capitals)

Name: _____ First name: _____
Company: _____ Department: _____
Function: _____
Address: _____
Post code: _____ Town: _____
Country: _____
Tel.: _____ Fax: _____
E-mail: _____

Payment on receipt of invoice, preferably by:

❒ Bank transfer
❒ Visa ❒ Eurocard

Card No: _____ Expires on: _____/_____

Please confirm your intra-Community VAT number:
If no number in entered, VAT will be automatically applied. Subsequent reimbursement will not be possible.

_____