REDENOMINATION OF TURKISH LIRA BY DROPPING SIX ZEROS

February 2004

CENTRAL BANK OF THE REPUBLIC OF TURKEY

OUTLINE

- ✓ Evaluation and the Rationale
- ✓ Benefits of Removing Zeros from the Turkish Lira
- ✓ Timing of the Operation
- ✓ Provisions of the Law on YTL
- ✓ Stages of the Zero Removal Operation
- ✓ Potential Economic Impacts of the Operation
- ✓ YTL Banknote and Coin Denominations
- ✓ Practices of Some Countries
- ✓ Steps to be Taken
- ✓ Conclusion

I- EVALUATION AND THE RATIONALE

✓ As a consequence of the inflationary period experinced from 1970s onwards, banknotes in circulation increased 38,318 fold from its end-1980 level of TL 278.6 billion and reached TL 10.7 quadrillion as of December 31, 2003.

Banknotes in Circulation

Breakdown by Denomination (as of 31 December 2003)

Denomination	Pieces	%	Amount (trillion TL)	%
20.000.000	427.479.572	34,2	8.549,6	80,1
10.000.000	130.239.508	10,4	1.302,4	12,2
5.000.000	97.107.002	7,8	485,5	4,5
1.000.000	244.274.021	19,6	244,3	2,3
500.000	145.749.658	11,7	72,9	0,7
250.000	54.452.878	4,4	13,6	0,1
Other*	148.990.628	11,9	7,2	0,1
Total	**1.248.293.267**	**100,0**	**10.675,5**	**100,0**

(*) Withdrawn from circulation but still in redemption.

I- EVALUATION AND THE RATIONALE

DENOMINATIONS INTRODUCED DURING THE PERIOD OF 1981-2002

Denomination	Issue Date	Time Span till Issuance of Next Denomination	Rate of Inflation (CPI) Between the Periods	Value in USD of Newly Issued Denomination*
5,000	02.11.1981			38,7
10,000	25.10.1982	1 year	29,1	55,5
20,000	09.05.1988	5 year 6 months	670,9	15,5
50,000	15.05.1989	1 year	60,2	24,3
100,000	11.11.1991	2 year 6 months	235,9	20,2
250,000	02.10.1992	11 months	57,3	34,2
500,000	18.03.1993	5 months	32,9	52,7
1,000,000	16.01.1995	1 year 10 months	251,8	25,0
5,000,000	06.01.1997	2 year	195,6	46,2
10,000,000	05.11.1999	2 year 10 months	416,7	20,6
20,000,000	05.11.2001	2 year	140,4	12,8
Average		2 year	209,1	31,4

Source: CBRT

(*) CBRT foreign exchange selling rate.

✓ **Purchasing power of TL** declined continuously due to persistent inflation.

✓ In order to meet the increased need for larger issues, a new banknote was issued, almost every other year since 1981.

✓Thus since 1981, **11 new, larger denominations** have been issued.

I- EVALUATION AND THE RATIONALE

THE HIGHEST DENOMINATIONS IN CIRCULATION AROUND THE WORLD

Country	Denomination	Value in USD
Indonesia	100.000	12,04
Cambodia	100.000	25,06
Lebanon	100.000	66,03
Mozambique	100.000	4,24
Paraguay	100.000	16,09
Romania	1.000.000	31,01
Turkey	**20.000.000**	**15,04**
Vietnam	100.000	6,39

Source: MRI Bankers' Guide to Foreign Currency

Note: Financial Times, FX Rates, 13.01.2004.

✓ ***Psychological Effect***

Due to its record-high denominations in the world, **Turkish Lira** lost prestige in the eyes of the general public.

I- EVALUATION AND THE RATIONALE

✓ Multiple zeros cause difficulties in;

- Expressing monetary values,
- Transactions at the cashier's office,
- Book-keeping and statistical records,
- Data processing software,
- Payment systems,
- Price tagging,
- Many areas of every day life, from taximeters to gas pumps.

I- EVALUATION AND THE RATIONALE

- ✓ Expression of some economic aggregates in terms of “quadrillion” negatively affected some **main functions of TL**, such as being a store of value and means of exchange.

- ✓ As the **SWIFT System**, which has 7,471 members worldwide, permits a maximum of 14 digit figures, it is not possible to carry out transactions exceeding TL 99 trillion.

I- EVALUATION AND THE RATIONALE

High and Persistent Inflation

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Higher Cycle Figure for Banknotes

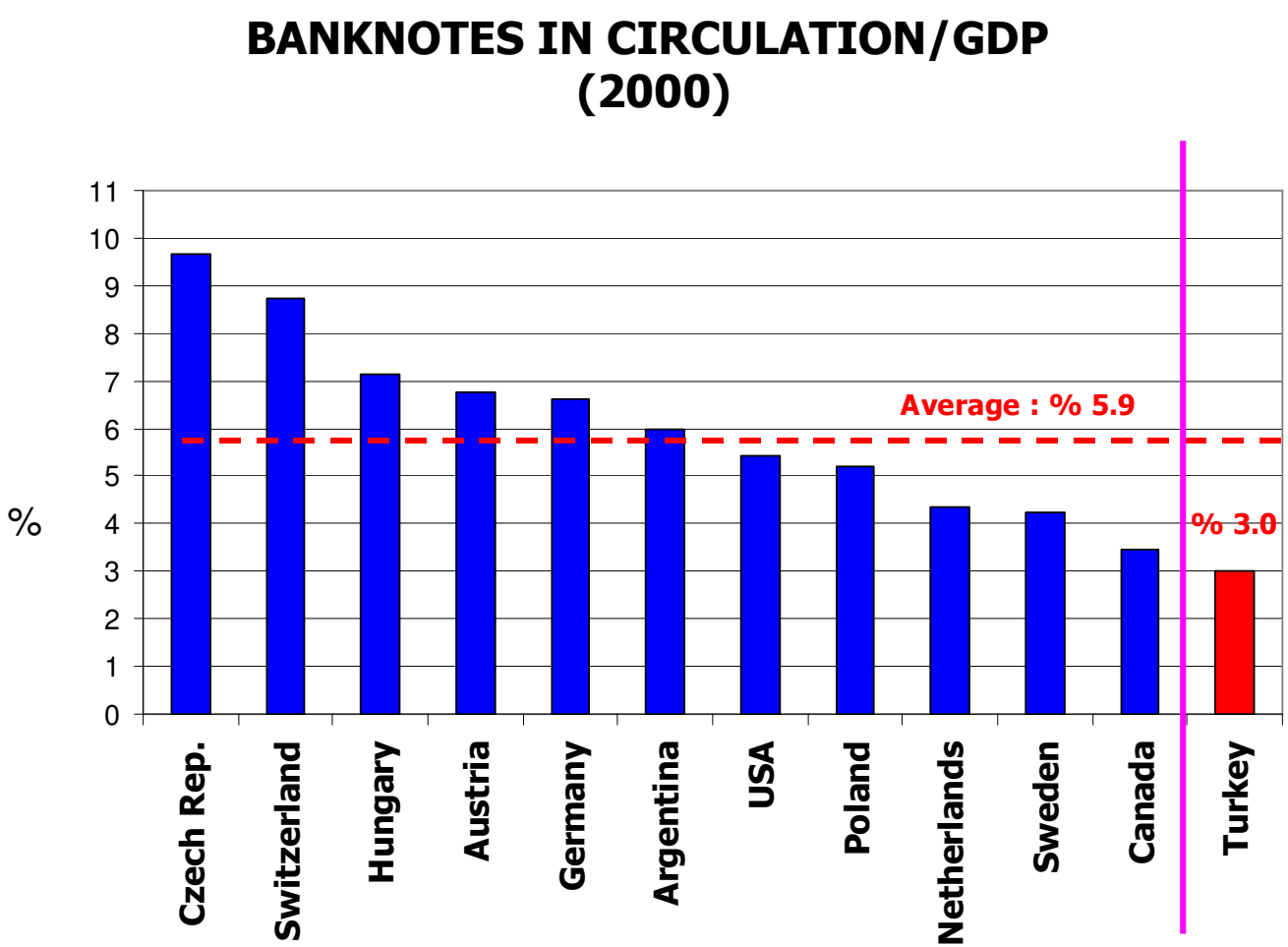
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More Operations at the Cashier's Offices

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- **Higher production, distribution and storage costs,**
- **Higher operational risk,**
- **Continuous need for larger denomination banknotes.**

I- EVALUATION AND THE RATIONALE



Source: Central Banks Balance Sheets, IFS.
Banknote Printers' Conference Statistics-2000-2001.

✓ The ratio of banknotes in circulation to GDP varies among the countries, depending on factors such as their economic conditions, how widespread non-cash payment systems are, and also whether national currency is a reserve currency or not.

✓ **In Turkey, this figure (3%) remained below that of many other countries.**

✓ This is because, high inflation increases the opportunity cost of holding cash and thus **decreases the demand for banknotes**.

I- EVALUATION AND RATIONALE

BANKNOTE CYCLE FIGURES IN SOME COUNTRIES (2001)

COUNTRY	BANKNOTES IN CIRCULATION (thousand USD) (A)	TOTAL VOLUME OF TRANSACTIONS (thousand USD) (B)	BANKNOTE CYCLE FIGURES (B/A)
Turkey	**3.645.134**	**45.994.752**	**12,6**
Finland	2.054.659	21.667.247	10,5
Netherlands	9.195.074	93.145.644	10,1
France	27.924.175	222.209.728	8,0
Belgium	8.113.239	61.556.240	7,6
Norway	4.743.187	32.364.197	6,8
Czech Rep.	5.565.372	29.951.141	5,4
Sweden	9.593.558	44.522.386	4,6
Hungary	3.962.889	12.136.077	3,1

Total Transaction Volume = Total Issued + Total Returned

Result:

Banknotes in Circulation/GDP : Low

Cycle Figure for Banknotes : High

✓ In Turkey, the ratio of banknotes in circulation to GDP is low while the **cycle figure for banknotes** is high.

Reason:

✓ As an outcome of high inflation, economic units are **unwilling to hold banknotes** and banknotes circulate in the economy with a **high** rate.

I- EVALUATION AND THE RATIONALE

- ✓ In the light of the above mentioned factors, obtaining a simplification in the records and the expression of monetary aggregates, by means of **removing six zeros** from TL, has in fact become a **technical necessity**.

I- EVALUATION AND THE RATIONALE

WHAT HAS BEEN DONE UP TO NOW

- ✓ The **first** Draft Bill that aimed at removing five zeros from Turkish Lira was presented to the Prime Ministry on December 25, 1998.
- ✓ The **second** Draft Bill for dropping six zeros was submitted to the Ministry of State in charge of the Economy on May 26, 2000.
- ✓ However, "zero-dropping operation" could not be performed until now, due to the facts that:
  - ✓ the programs, that were put into practice with the aim of fighting against inflation, could not be implemented, and
  - ✓ expected and realized rates of inflation could not be pulled down to reasonable levels.

II- BENEFITS OF REMOVING ZEROS FROM THE TURKISH LIRA

- ✓ It will now be possible to overcome the above mentioned technical and operational difficulties caused by multiple zeros.
- ✓ The operation will manifest not only the success achieved in fighting with inflation, but also the determination to bring down inflation to single-digit figures and keep it there.
- ✓ Public confidence towards the national currency will be re-established.
- ✓ The operation will help eliminate not only the backward-looking behaviour, but also likely resistance in expectations to single digit of inflation.
- ✓ Single digit inflation will enable the denomination composition to remain unchanged for quite a long period of time.

II- BENEFITS OF REMOVING ZEROS FROM TURKISH LIRA

- ✓ With the introduction of two larger value YTL denominations, transaction volumes of commercial banks and Central Bank will be relieved, and the cost of banknote production will be reduced.
- ✓ Full conversion of TL 500,000 and partial conversion of TL 1,000,000 banknotes into coins, will increase the efficiency of banknote processing systems and improve the overall quality of banknotes in circulation.
- ✓ Simplification in records and transactions, will facilitate the expression of monetary values.
- ✓ As a consequence of the zero-dropping operation, along with attaining single-digit inflation, the national currency will be re-credited.

III- TIMING OF THE OPERATION

- ✓ The redenomination of the Turkish Lira will be effective as of 1st January 2005, beginning of the new fiscal year, in order to avoid a dual-record system, and also not to cause an extra burden of preparing interim financial statements for those real persons and legal entities that are obliged to keep books.

- ✓ In the process of transition to single digit inflation, year 2005 is believed to be the best time for managing expectations.

IV- PROVISIONS OF THE LAW ON YTL

- ✓ The law regarding YTL was published in the Official Gazette No.25363 dated 31 January 2004.
- ✓ Currency unit of the Republic of Turkey is "Yeni Türk Lirası" (New Turkish Lira). Sub-unit of Yeni Türk Lirası is the "Yeni Kuruş" (New Kuruş). One Yeni Türk Lirası (YTL) equals 100 Yeni Kuruş (YKr).
- ✓ The Council of Ministers is entitled to;
  - ✓ Remove the expression of "Yeni" (New) from "Yeni Türk Lirası" and "Yeni Kuruş",
  - ✓ Determine the practical essentials for resuming the use of the expression of Türk Lirası (Turkish Lira) in book- and record-keeping.
- ✓ When converting TL values to YTL;
  The conversion rate is 1,000,000 TL=1 YTL.
- ✓ As for payments in YTL, fractions exceeding half-a-Yeni Kuruş will be rounded to one Yeni Kuruş; half-a-Yeni Kuruş or less will be disregarded.
- ✓ All references made to "Turkish Lira" or "Lira" in laws and other legislation, administrative procedures, court decisions, legal operations, commercial papers and other documents that produce legal effects as well as means of payment and instruments of exchange, shall be considered to have been made to "New Turkish Lira" at the conversion rate specified above.

IV- PROVISIONS OF THE LAW ON YTL

- ✓ To fight counterfeit, the conditions related to dimension, colour, material, resolution, expressions to take place on the banknotes and other related conditions for reproducing and publishing the pictures and images of the banknotes that are currently in circulation, or withdrawn from circulation, or to be put into circulation, shall be set by the Central Bank of the Republic of Turkey and announced in the Official Gazette.

- ✓ Persons who fail to comply with the conditions to be announced shall be charged with a heavy fine starting from one billion five hundred million Turkish Liras (USD 1,135*) up to five billion Turkish Liras (USD 3,785*), unless a more serious crime is involved.

- ✓ The Turkish Lira banknotes and coins that are currently in circulation shall be in circulation between January 1st, 2005 and December 31st, 2005, along with the New Turkish Lira banknotes as well as the new coins to be issued.

* CBRT Fx Buying for USD as of January 28, 2004.

IV- PROVISIONS OF THE LAW ON YTL

- ✓ The provisions on the concurrent circulation and conversion of these banknotes shall be determined by Central Bank of the Republic of Turkey, while the provisions on the concurrent circulation and conversion of coins shall be established by the Prime Ministry, the Undersecretariat of Treasury.

- ✓ The Minister responsible for the Undersecretariat of Treasury shall be entitled to remove the doubts with respect to the execution of the Law and make necessary arrangements in this respect; the Ministry of Finance, the Ministry of Industry and Trade, the Undersecretariat of Treasury, the Central Bank of the Republic of Turkey, the Capital Market Board, the Banking Regulation and Supervision Agency shall be entitled to make necessary arrangements concerning those matters within the scope of their duties.

IV- PROVISIONS OF THE LAW ON YTL

- ✓ For those legal transactions and those documents producing legal effect, that were originally arranged in Turkish Lira, the transaction and the documents prepared shall be exempt from any and all kinds of tax, duty, fee and other liabilities if these are converted into the New Turkish Lira before or on December 31st, 2005, by the conversion rate specified in the Law.

- ✓ Between January 1st, 2005 and December 31st, 2005, the prices of all goods and services shall be expressed in terms of both the Turkish Lira and the New Turkish Lira on the lists of labels and tariffs to be arranged in accordance with Article 12 of the Law on the Protection of Consumers, No. 4077.

- ✓ The provisions of this law shall be executed by the Council of Ministers.

V- STAGES OF THE ZERO REMOVAL OPERATION

At the first stage,

TL and YTL banknotes will be **in circulation concurrently** for 1 year and TL banknotes will be withdrawn from circulation at the end of the first year.

At the second stage,

Similar to many country practices, after a few years, the expression of “Yeni” (New) before the “Turkish Lira” will be removed, and the use of the **expression of “TL” will be resumed.**

V- STAGES OF THE ZERO REMOVAL OPERATION

- ✓ The “Lira” expression has been kept unchanged when selecting a name for the new currency owing to its being an already accustomed term, the unique currency unit valid for the Republican period and its being identified with the country’s name.
- ✓ This method was adopted in many countries that perfomed zero-dropping operation and simply the word “New” was added before the name of the national currency, among which are Afghanistan, Albania, Belarus, Brazil, Bulgaria, China, Finland, France, Greece, Israel, North and South Korea, Laos, Macedonia, Mexico, Nicaragua, Peru, Poland, Romania, Russia, Serbia-Montenegro, Taiwan, Uganda, Uruguay, Vietnam and Zaire.
- ✓ Whereas in **hyperinflation countries,** such as Argentina, Brazil and Israel, **which had to remove zeros from their currencies several times**, different names have been preferred to prevent confusion between old and new currencies.
- ✓ With the assumption that, owing to the sustainability of economic stability, there will be no further need to drop zeros in the long run, no other naming was considered and the expression of “New” was chosen to precede the name of the national currency, for the sake of simplicity.

VI- POTENTIAL ECONOMIC IMPACTS OF THE OPERATION

- ✓ **Evaluation of potential price increases** that may result from possible rounding up and impact of probable monetary illusions:

  - During the process of transition to Euro, **use of 12 different conversion rates** and the increases in the prices of frequently consumed commodities and services, made the impact of rounding up more noticeable.

  - Nonetheless, in 2002, the inflation rate in the Euro zone (2.2 %) realized **below the** 2001 figure (2.5 %).

  - According to Eurostat, EU's statistical agency, the effect of transition to Euro on price increases in the first six months of 2002, ranged from 0.0 % to 0.16 % among member countries but did not exceed **0.2 %**.

  - Whereas inflation is an indicator of the continuity of price increases. While rounding up of prices exhibit a continuous nature due to certain characteristics of of high inflationary environments, such as the effect of withdrawn denominations and loss of coin utilization practice, **potential price increases that may result from dropping zeros are not expected to have a continuous nature.**

VI- POTENTIAL ECONOMIC IMPACTS OF THE OPERATION

- ✓ Therefore, retailers' price behaviour in the form of passing the costs of YTL conversion on to consumers or rounding prices upward in order to benefit from the "illusion of kuruş", **will not exhibit a continuity.**
- ✓ Consequently, the rounding up effect of the zero removal operation in Turkey, is expected to be less noticable **due to the already existing rounding up effect** and hence, rather than having an inflationist impact, the operation is expected to bring to the forefront, the **determination** to reduce inflation to single-digit numbers.
- ✓ Furthermore, removing zeros from our national currency is **not expected to have either a positive or a negative impact on exchange rates or the overall level of interest rates, other than having a positive impact on expectations,** since the main factors determining exchange rates and overall level of interest rates are the fundamentals of the economy and the economic stabilization program.

VII- YTL BANKNOTE AND COIN DENOMINATIONS

<u>YTL Banknotes</u> : 1, 5, 10, 20, 50 and 100 YTL
<u>Coins</u> : 1, 5, 10, 25, 50 Yeni Kuruş (YKr) and 1 Yeni Lira (YTL)

- ✓ To facilitate the recognition of banknotes and to prevent confusion in the transition to YTL, denominations with the same purchasing power will be issued in similar colours and designs for both TL and YTL.
- ✓ Practices in several countries reveal that a maximum of 6 or 7 banknote denominations is optimum, otherwise some banknote denominations remain out of use.*
- ✓ Improvements made in the YTL banknotes for the visually impaired and the visually disadvantaged;
  - ✓ Marked relief printing at different locations on banknotes,
  - ✓ Contrast colours for successive denominations,
  - ✓ Different dimensions for some denominations.

* Source: IMF Working Paper, March 1995.

VII- YTL BANKNOTE AND COIN DENOMINATIONS

Introduction of YTL 1, in both banknote and coin form;

- ✓ Will give the Printing Plant and the State Mint flexibility in terms of **their production programs**.
- ✓ Will improve the overall level of banknote quality: The low cycle figure for smaller denomination banknotes has a negative effect on banknote quality and decreases the **efficiency** of banknote processing systems. Though, all YTL 1 banknotes are planned to be converted into coins in future, during the transition period, this denomination is intended to be issued both as banknote and coin **in order to facilitate the adaptation process**.
- ✓ Will decrease production costs: Banknote **printing costs** considerably exceed the costs for minting coins, as the latter have a lifetime of more than 20 years in average. Co-circulation of YTL 1 banknotes and coins is expected to reduce banknote printing costs and thus the total production costs for this denomination(banknote+coin).
- ✓ Will provide flexibility in terms of **distribution and storage** during the period of changeover.
- ✓ Will restore the habit of **coin utilization** among the public.

VII- YTL BANKNOTE AND COIN DENOMINATIONS

DENOMINATIONS CO-CIRCULATING AS COIN AND BANKNOTE IN SOME COUNTRIES

UNITED STATES	1 American Dollar
BULGARIA	1 Lev
CZECH REPUBLIC	20, 50 Korun Ceskych
FINLAND	10 Fin Markka
INDIA	5 Rupee
HONG KONG	10 Dollar
ISRAEL	1, 5, 10 New Shequel
MEXICO	10, 20, 50 Nuevos Pesos
RUSSIA	5 Ruble
SINGAPORE	1 Dollar
TURKEY	250,000 Turkish Lira
UKRAINE	1 Hryvnia

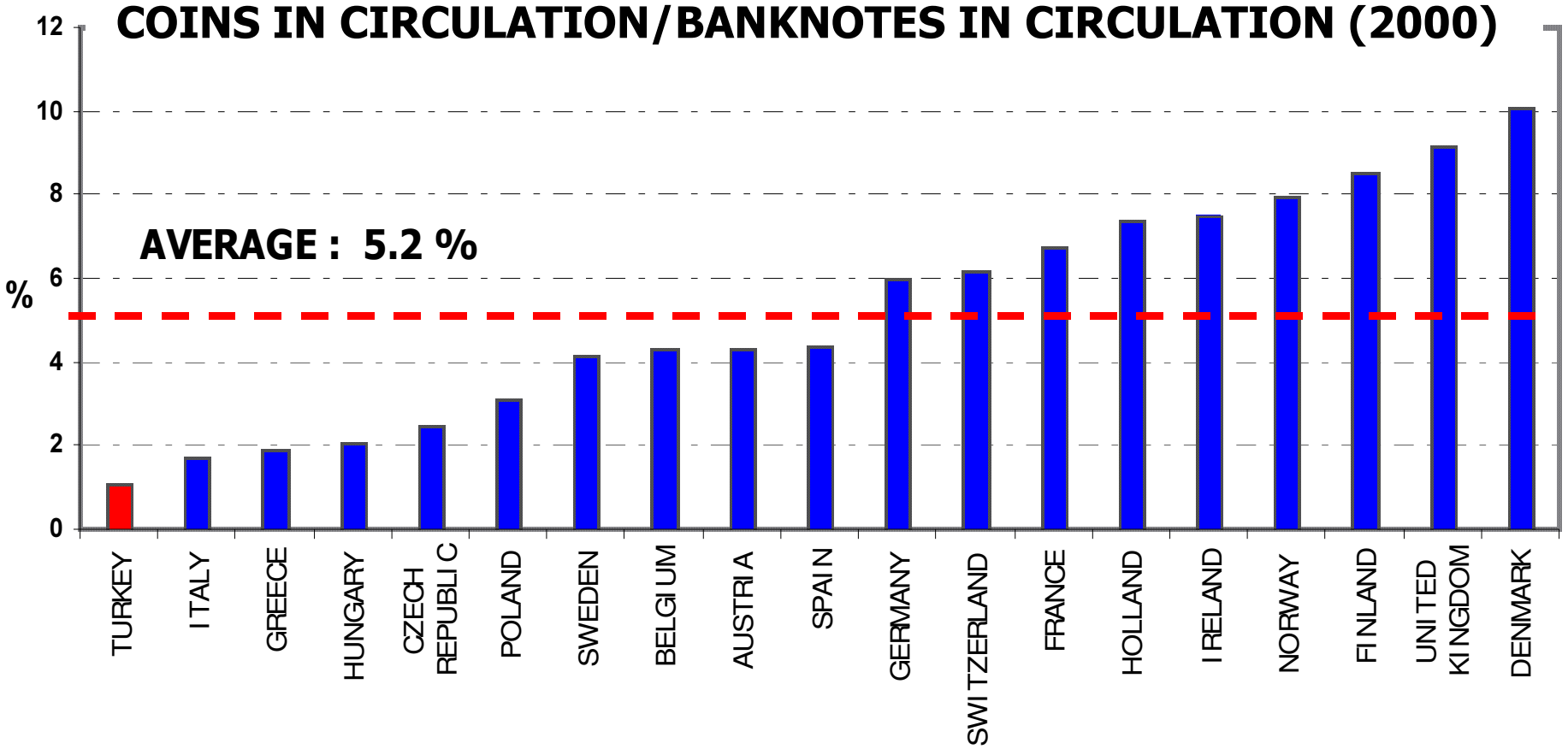
- ✓ Some denominations co-circulate both in banknote and in coin form.

Source: MRI Bankers' Guide to Foreign Currency

Web Sites of Various Central Banks

VII- YTL BANKNOTE AND COIN DENOMINATIONS

- ✓ Coins/Banknotes in Circulation ratio generally varies according to the purchasing power of the coins in a country. This ratio declines as coins have a low purchasing power.
- ✓ The Coins/Banknotes in Circulation ratio of Turkey, which is 1.1 % at present, is expected to reach 5.2 % **after the operation,** i.e. to the average level for the European countries before the introduction of the Euro.



VII- YTL BANKNOTE AND COIN DENOMINATIONS

Reasons for selecting YTL 100 denomination as the highest value banknote:

✓YTL 100 is believed to be **adequate** for cash transactions,

✓YTL 200 and 500 banknotes would have been used **only rarely** in the retail market,

✓To avoid potential comments relating high denominations with the possibility of inflation coming back, and thus to avoid misleading the general public's **expectations**,

✓The fact that introducing unusually high value denominations, may raise the interest of **"international"** counterfeiters,

VII- YTL BANKNOTE AND COIN DENOMINATIONS

More reasons for selecting YTL 100 denomination as the highest value banknote:

- ✓ Not to facilitate **money laundering activities,**
- ✓ Not to **depress** citizens at lower income level.
- ✓ In an environment of economic stability enjoying the Euro-zone standards, the purchasing power of YTL 100 is to fall below that of today's TL 20,000,000 not early than the year 2059.
- ✓ Last but not least, YTL 200 will not be needed in the long term, with inflation realizing around 5 % after the year 2006.

VIII- PRACTICES OF SOME COUNTRIES THAT REMOVED ZEROS FROM THEIR CURRENCIES

✓ **49 countries** removed zeros from their currencies.

COUNTRY (number of times of zero removal operation)	DATE	NUMBER OF ZEROES REMOVED / RATE OF CONVERSION	NEW CURRENCY UNIT AND VALUE
AFGHANISTAN (1)	October 2002	3 zeroes	**1,000 Afgani= 1 New Afgani**
ALBANIA (1)	August 1965	1 zero	**10 (old) Leke = 1 New Lek**
ANGOLA (2)	July 1995	3 zeroes	**1000 Novas Kwanzas = 1 Kwanza Reajustado**
	1 December 1999	6 zeroes	**1,000,000 Kwanzas Reajustados = 1 Kwanza**
ARGENTINA (4)	January 1970	2 zeroes	100 Pesos Moneda Nacional = 1 Peso Ley
	June 1983	4 zeroes	10,000 Pesos Ley = 1 Peso Argentino ($a)
	June 1985	3 zeroes	1,000 Pesos Argentinos = 1 Austral
	January 1992	4 zeroes	10,000 Australes = 1 Peso Convertible
AZERBAIJAN (1)	End 1992	1 zero	10 Soviet Rubles = 1 Manat
BAHRAIN (1)	October 1965	1 zero	10 Gulf Rupees = 1 Dinar
BELARUS (2)	25 May 1992	1 zero	10 Soviet Rubles = 1 Rubel
	1 January 2000	3 zeroes	**1,000 Rubles = 1 New Ruble**
BOLIVIA (2)	January 1963	3 zeroes	1,000 Bolivianos = 1 Peso Boliviano
	January 1987	6 zeroes	1,000,000 Pesos Bolivianos= 1 Boliviano

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BRASIL (6)	February 1967	3 zeroes	**1,000 Cruzeiros = 1 New Cruzeiro**
	May 1970	3 zeroes	**1,000 New Cruzeiros = 1 Cruzeiro**
	February 1986	3 zeroes	1,000 Cruzeiros = 1 Cruzado
	January 1989	3 zeroes	**1,000 Cruzados = 1 NewCruzado**
	March 1990	-	**1 New Cruzado = 1 Cruzeiro**
	August 1993	3 zeroes	1,000 Cruzeiros = 1 Cruzeiro Real
	1 July 1994	3 zeroes/2.75	2,750 Cruzeiros Reais = 1 Real
BULGARIA (2)	January 1962	1 zero	**10 (old) Leva = 1 New Lev**
	1 July 1999	3 zeroes	**1,000 (old) Leva = 1 New Lev**
CHILE (2)	January 1960	3 zeroes	1,000 Pesos = 1 Escudo
	September 1975	3 zeroes	1,000 Escudos = 1 Peso

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CHINA (1)	March 1955	4 zeroes	**10,000 (old) Yuan = 1 New Yuan**
CROATIA (1)	30 May 1994	3 zeroes	1,000 Croation Dinara = 1 Kuna
DEM. REPUBLIC OF	1967	3 zeroes	1,000 Congolese Francs = 1 Zaire
CONGO	1993	6 zeroes/3	**3,000,000 Zaires = 1 New Zaire**
(ZAIRE) (3)	1998	5 zeroes	**100,000 New Zaires = 1 Franc Congolaise**
ESTONIA (1)	20 June 1992	1 zero	10 Rubles = 1 Kroon
FINLAND (1)	1963	2 zeroes	**100 (old) Markka = 1 New Markka**
FRANCE (1)	1960	2 zeroes	**100 Francs = 1 New Franc**
GEORGIA (1)	25 September 1995	6 zeroes	1,000,000 Kuponi = 1 Lari

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COUNTRY (number of times of zero removal operation)	DATE	NUMBER OF ZEROES REMOVED / RATE OF CONVERSION	NEW CURRENCY UNIT AND VALUE
GERMANY (2)	November 1923	12 zeroes	**1,000,000,000,000 Mark = 1 Rentenmark**
	20 June 1948	1 zero	**10 Reichsmark = 1 Deutsche mark**
GREECE (1)	May 1954	3 zeroes	**1,000 (old) Drachmai = 1 New Drachma**
GUINEA (CONAKRY) (1)	March 1960		1 CFA Franc = 1 Franc
	1971	1 zero	10 Francs = 1 Syli
	1985		1 Syli = 1 Franc Guineen
HUNGARY (1)	August 1946	5 zeroes/4	400,000 Quadrillion Pengoe = 1 Forint
ISLAND (1)	January 1981	2 zeroes	**100 (old) Kronur = 1 Krona**
ISRAEL (4)	24 December 1948	3 zeroes	1,000 Prutot = 1 Pound
	1 January 1960	2 zeroes	100 Agorot = 1 Pound
	24 February 1980	1 zero	10 Pounds = 1 Sheqel
	4 September 1985	3 zeroes	**1,000 (old) Sheqalim = 1 New Sheqel**
KIRGISISTAN (1)	10 May 1993	2 zeroes/2	200 Ruble = 1 Som
N.KOREA (1)	February 1959	2 zeroes	**100 (old) Won = 1 New Won**
S.KOREA (1)	1962	1 zero	10 Hwan = 1 Won

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COUNTRY (number of times of zero removal operation)	DATE	NUMBER OF ZEROES REMOVED / RATE OF CONVERSION	NEW CURRENCY UNIT AND VALUE
LAOS (2)	June 1976	1 zero/2	20 Old Kip = 1 Lao Liberation Kip
	December 1979	2 zeroes	100 Liberation Kip = 1 New Kip
LATVIA (1)	June 1993	2 zeroes	100 Talonu = 1 Litas
LETONIA (1)	1 March 1993	2 zeroes/2	200 Rublu = 1 Lats
MACEDONIA (1)	May 1993	2 zeroes	**100 Old Denari = 1 New Denar**
MEXICO (1)	January 1993	3 zeroes	**1,000 Pesos = 1 New Peso**
	January 1996		**1 New Peso = 1 Peso**
MOLDOVA (1)	1993	3 zeroes	1,000 (ruble) Coupons = 1 Lei (coupon)
MOROCCO (1)	October 1959	2 zeroes	100 Francs = 1 Dirham
NICARAGUA (1)	15 February 1988	3 zeroes	**1,000 Cordobas = 1 New Cordoba**
OUZBEKISTAN (1)	1 July 1994	3 zeroes	1,000 Sum-coupons = 1 Sum-note
PARAGUAY (1)	October 1943	2 zeroes	100 Pesos Fuertes = 1 Guarani
PERU (2)	1985	3 zeroes	1,000 Soles = 1 Inti
	1 July 1991	6 zeroes	**1,000,000 Intis = 1 New Sol**
POLAND (1)	January 1995	4 zeroes	**10,000 (old) Zlotych=1 New Zloty**
ROMANIA (1)	August 1947	4 zeroes/2	**20,000 (old) Lei = 1 New Leu**
RUSSIAN (3)	December 1947	1 zero	**10 (old) Rubles = 1 New Ruble**
	January 1961	1 zero	**10 Rubles= 1 New Ruble**
	1 January 1998	3 zeroes	**1,000 Rubles = 1 New Ruble**

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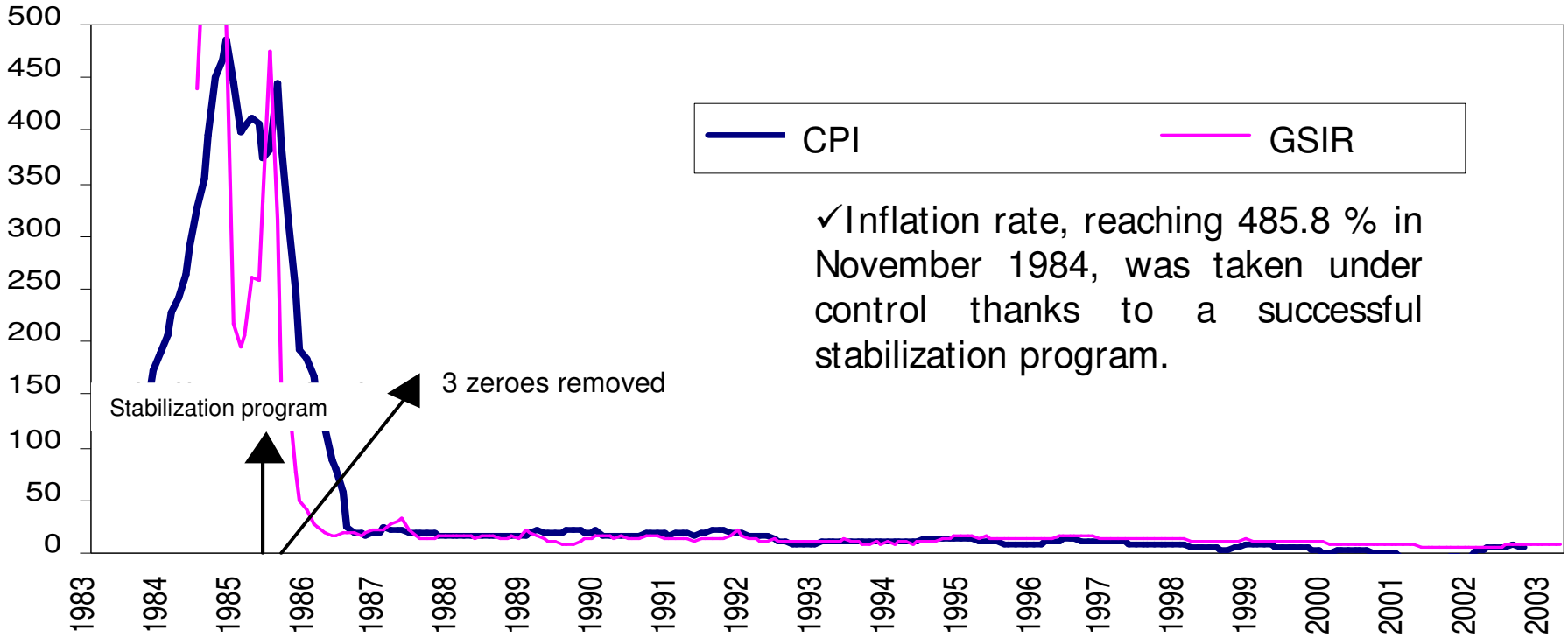
COUNTRY (number of times of zero removal operation)	DATE	NUMBER OF ZEROES REMOVED / RATE OF CONVERSION	NEW CURRENCY UNIT AND VALUE
SERBIA AND MONTENEGRO (YUGOSLAVIA) (6)	1 January 1966	2 zeroes	**100 Dinars = 1 New Dinar**
	3 January 1990	4 zeroes	**10,000 Dinars = 1 New Dinar**
	1992	1 zero	**10 Dinars = 1 New Dinar**
	October 1993	6 zeroes	**1,000,000 Dinars = 1 (October) Dinar**
	October 1993	9 zeroes	**1,000,000,000 (October) Dinars = 1 (1994) Dinar**
	January 1994	6 zeros/12	**12,000,000 (1994) Dinars = 1 Super Dinar**
SUDAN (1)	1992	1 zero	10 Pounds = 1 Dinar
TAIWAN (1)	15 June 1949	4 zeroes/4	**40,000 Taiwan Dollar = 1 New Taiwan Dollar**
TUNISIA (1)	December 1958	3 zeroes	1,000 Francs = 1 Dinar
UGANDA (1)	1987	2 zeroes	**100 Shillings = 1 New Shilling**
UKRANIA (1)	2 September 1996	5 zeroes	100,000 Karbovanets = 1 Hryvnia
URUGUAY (2)	1975	3 zeroes	**1,000 Pesos Oro = 1 New Peso**
	1993	3 zeroes	**1,000 New Pesos = 1 Peso Uruguayo**
VIETNAM (3)	1959	3 zeroes	**1,000 Dong (north) = 1 New Dong (north)**
	1975	2 zeroes/5	**500 Piastres (South) = 1 New South Vietnam Dong**
	September 1985	1 zero	**10 Dong = 1 New Dong**

Source: MRI Bankers' Guide to Foreign Currency 46 th Edition January 2003

ISRAEL

ISRAEL: CONSUMER PRICE INDEX (CPI) AND GOV. SECURITIES INTEREST RATES (GSIR)

(annual % change, annual compound interest rate)



Source: IFS

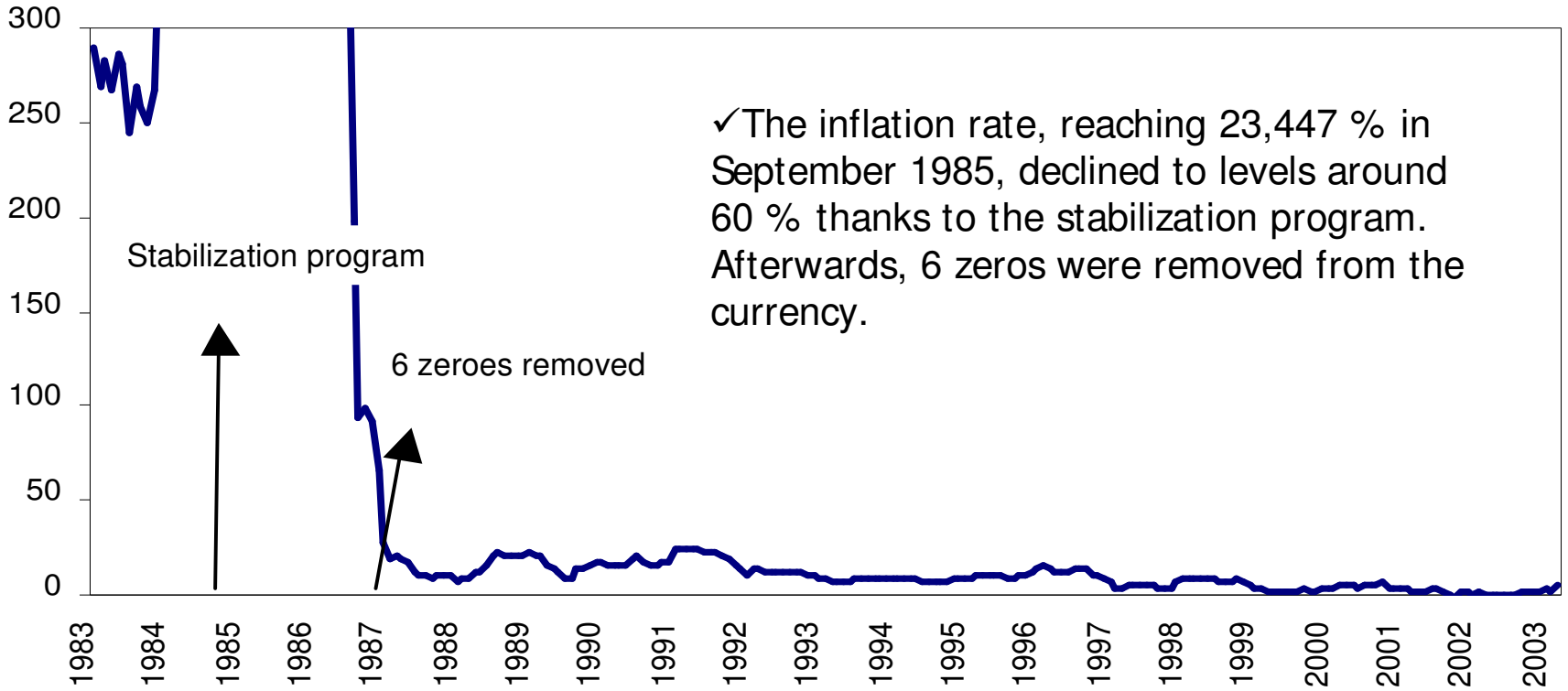
Annual inflation rate 1 month prior to the currency unit reform:

Date	*Rate*
August 1985	*386.4 %*

BOLIVIA

BOLIVIA: CONSUMER PRICE INDEX (CPI)

(annual % change)



Source: IFS

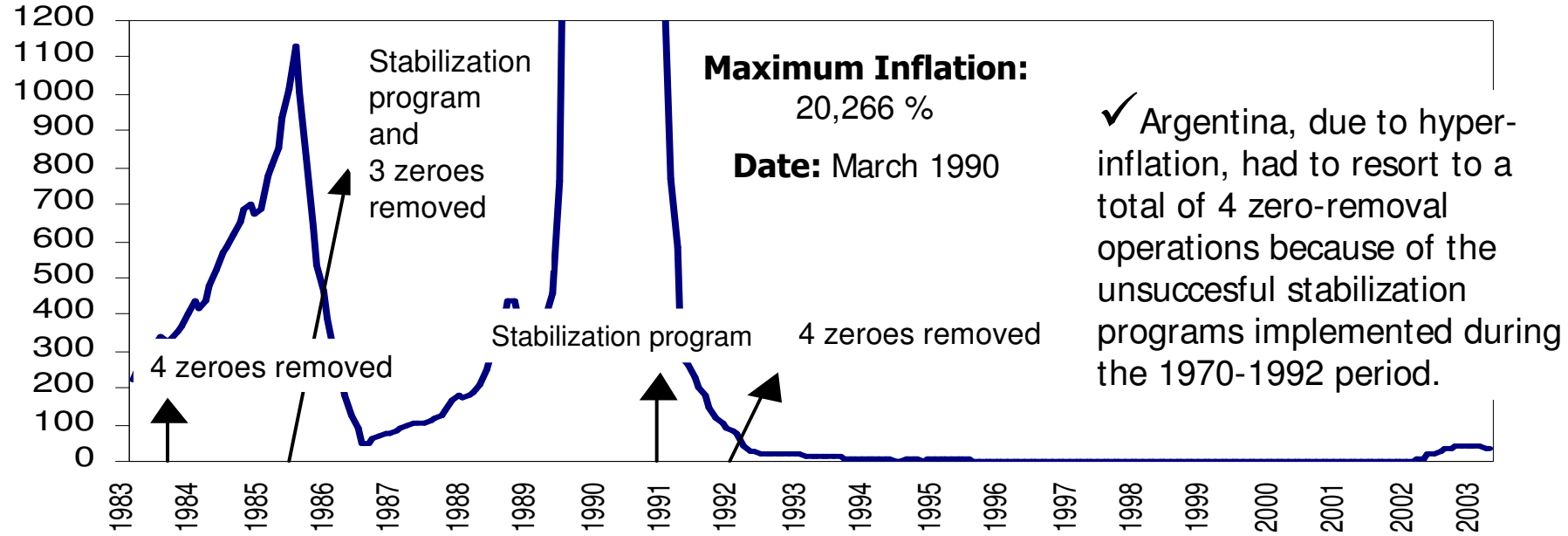
Annual inflation rate 1 month prior to the currency unit reform:

Date	*Rate*
December 1986	*66.0 %*

ARGENTINA

ARGENTINA: CONSUMER PRICE INDEX (CPI)

(annual % change)



Source: IFS

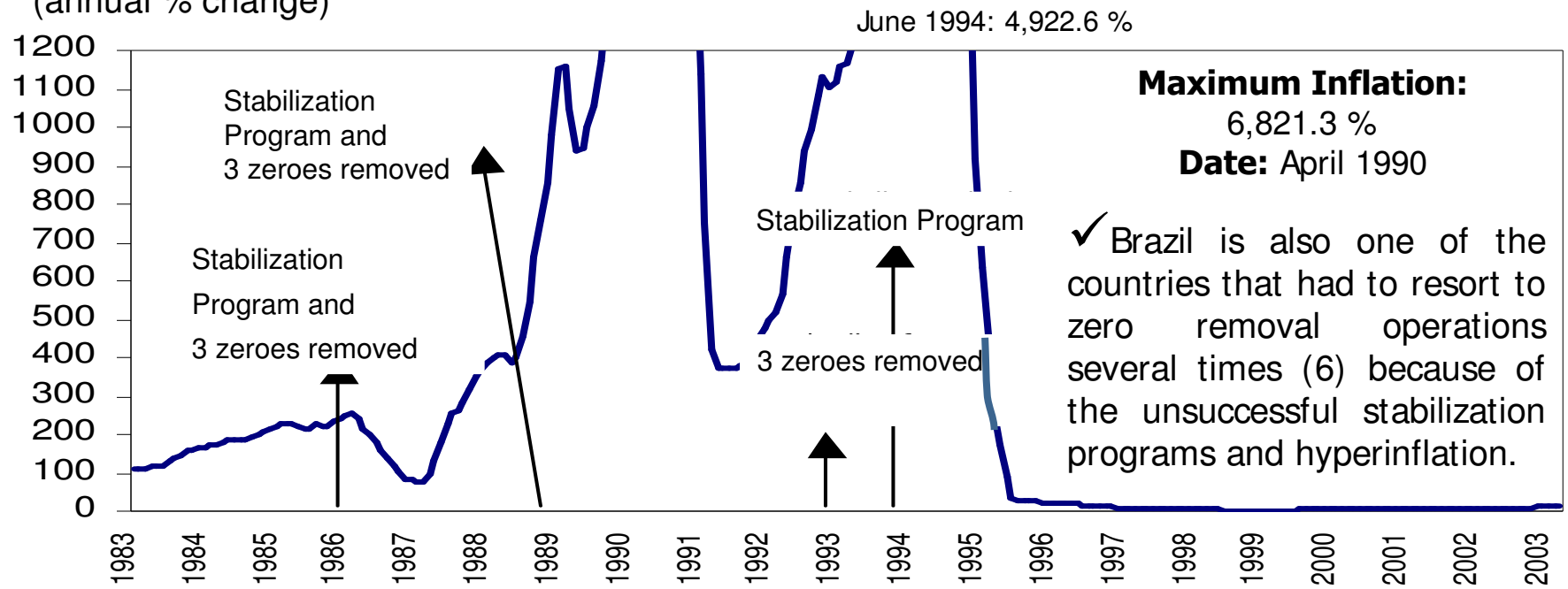
Annual inflation rate 1 month prior to the currency unit reform:

Date	*Rate*
May 1983	*310.0 %*
May 1985	*1,010.1 %*
December 1991	*84.0 %*

BRAZIL

BRAZIL: CONSUMER PRICE INDEX (CPI)

(annual % change)



Source: IFS

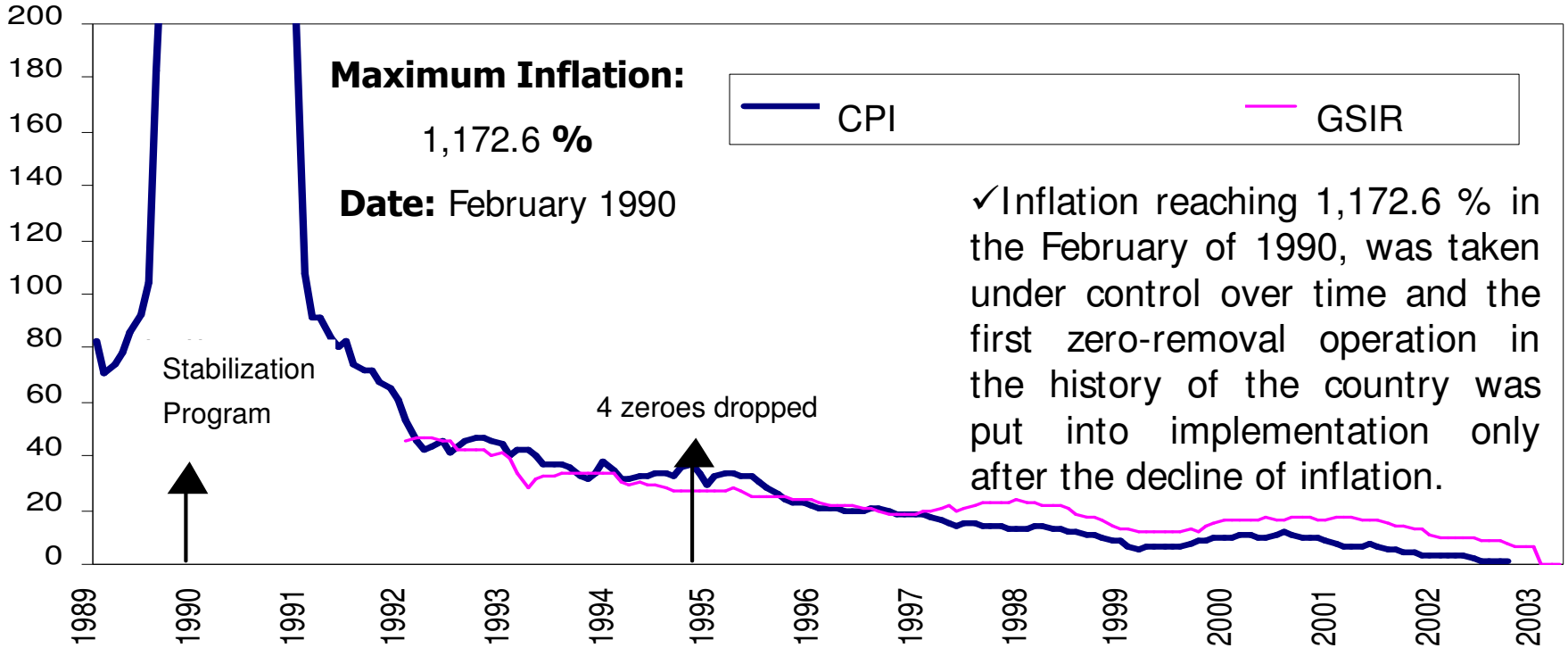
Annual inflation rate 1 month prior to the currency unit reform:

Date	*Rate*
January 1986	*250.2 %*
December 1988	*980.2 %*
July 1993	*1,581.7 %*

POLAND

POLAND: CONSUMER PRICE INDEX (CPI) and GOV. SECURITIES INTEREST RATES (GSIR)

(annual % change, annual compound interest rate)



Source: IFS

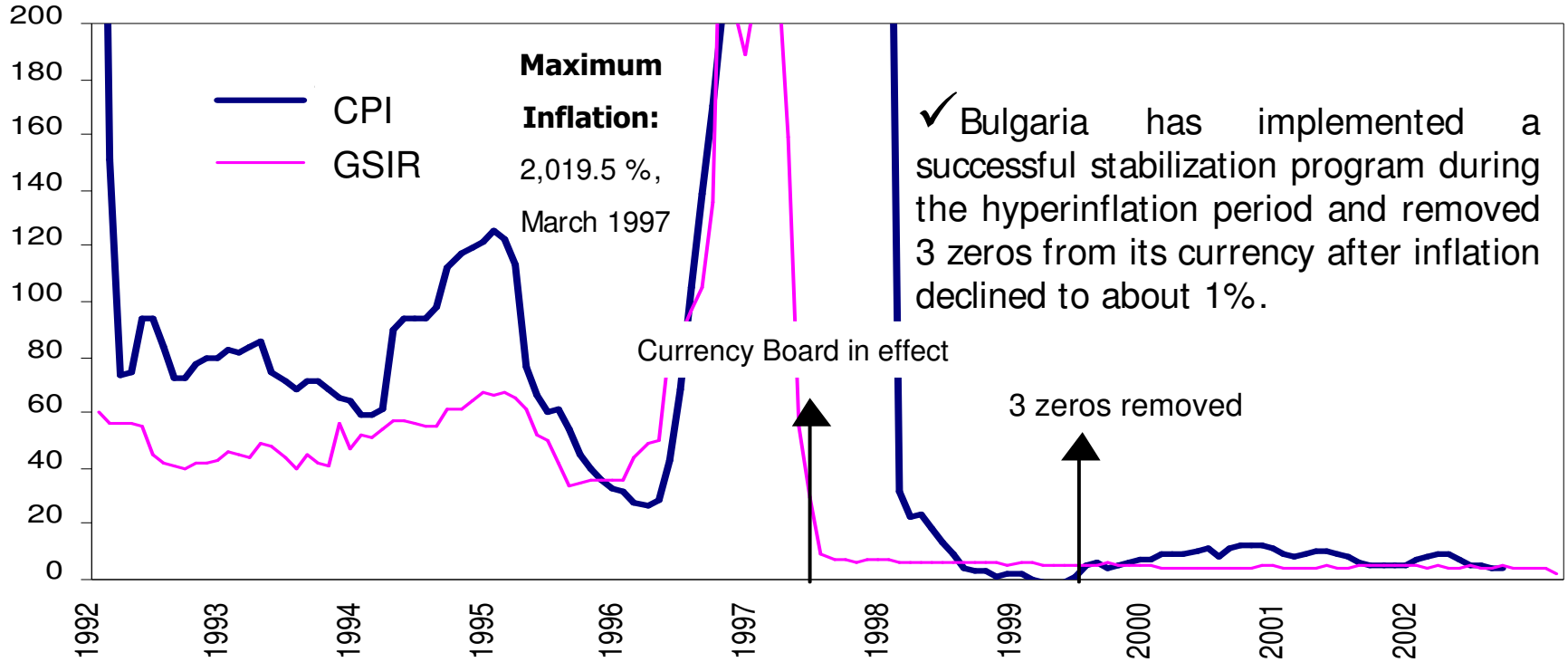
Annual inflation rate:
(1 month prior to the currency reform)

Date	*Rate*
December 1994	*29.4 %*

BULGARIA

BULGARIA: CONSUMER PRICE INDEX (CPI) and GOV. SECURITIES INTEREST RATES (GSIR)

(annual % change, annual compound interest rate)



Source: IFS

Annual inflation rate 1 month prior to the currency reform:

Date	*Rate*
June 1999	*1.2 %*

THE RESULTS FROM PRACTICES OF OTHER COUNTRIES

✓Removal of zeros from the currency is usually implemented along **with a stabilization program** and can be at different inflation rates.

✓In Israel, which is one of the countries where the stabilization program yielded successful results, the currency reform was made in just a short while after the stabilization program was launched.

✓In Poland, Bolivia and Bulgaria, currency reform was effected only after the **positive effects of the stabilization program** were observed. This is the **recommended approach** today.

✓In countries where stabilization programs failed (the examples of Argentina and Brazil), the **need to remove more zeros** emerged after a certain period of time.

✓It has been observed that the rounding up of prices lead to slight price increases during the first months of the zero-removal operation.

IX- STEPS TO BE TAKEN

Central Bank :

Steps to be taken	Estimated Date of Effect
✓ **Starting** the **production** of YTL banknotes following placement of paper and ink orders.	28.02.2004
✓ Official registration of the YTL code for the New Turkish Lira, by the International Standards Organization (ISO), as a currency to be used in international payment systems and its worldwide announcement.	30.06.2004
✓ **Adaptation** of computer software, Electronic Funds Transfer (**EFT**) and Electronic Securities Transfer (**EST**) and their tests.	30.09.2004

IX- STEPS TO BE TAKEN

Central Bank :

Steps to be taken	Estimated Date of Effect
✓ Arrangements at the CBRT branches for **banknote processing, collection** and **payment**.	31.10.2004
✓ Launching a comprehensive **publicity campaign** (booklets, leaflets,TV-Radio programs, seminars, etc.)	31.10.2004
✓ **Harmonization** of banknote processing systems.	30.11.2004
✓ Necessary arrangements in the legislation related to the implementaion.	30.11.2004
✓ Coordination of harmonization and transformation of the **accounting systems, computer software, bank accounts and functioning of clearing houses,** etc.	30.11.2004

IX- STEPS TO BE TAKEN

Central Bank :

Steps to be taken	Estimated Date of Effect
✓ Harmonization of the implementation programs of banks and other related institutions, to the changes to be made in the **EFT and EST** systems.	31.12.2004
✓ Grouping of **statistical data in TL and YTL** seperately.	31.12.2004
✓ Conversion of all **TL denominated accounts** to YTL units and modifications of all accounts and programs based on New Kuruş (YKr).	31.12.2004
✓ Distribution and storage of YTL banknotes.	31.12.2004

IX- STEPS TO BE TAKEN

Ministry of Finance:

Steps to be taken	Estimated Date of Effect
✓ Arrangement for **budgeting** public institutions' expenses in 2004.	
✓ Arrangements for setting the principles for the transformation of payment registering equipments.	30.06.2004
✓ Printing of new **revenue stamps** and making the arrangements related to the validity of old ones.	30.11.2004
✓ Arrangements for **administrative accounting and book-keeping,** etc.	30.11.2004
✓ Review of the **tax legislation** and making the necessary arrangements in this respect.	31.12.2004

IX- STEPS TO BE TAKEN

Undersecretariat of Treasury:

Steps to be taken	Estimated Date of Effect
✓ **Production and promotion of new coins** as well as other necessary arrangements related to the new coins.	31.12.2004
✓ Completion of all preparations by **public banks** for transition to YTL, including the harmonization of systems and software.	31.12.2004
✓ Arrangements for other issues that fall within Undersecretariat's scope of duties (such as setting a unit price for tenders of government securities).	30.11.2004

IX- STEPS TO BE TAKEN

Capital Market Board:

Steps to be taken	Estimated Date of Effect
✓ Necessary arrangements in the legislation on capital market practices.	30.11.2004
✓ Harmonization in the values of **stocks**, based on YTL, when necessary.	30.11.2004
✓ Arrangements for other issues that fall within the Board's scope of duties	31.12.2004

IX- STEPS TO BE TAKEN

Banks and Special Finance Houses:

Steps to be taken	Estimated Date of Effect
✓ Contributing to the **promotion** of YTL banknotes and coins.	31.10.2004
✓ **Harmonization** of computer softwate, ATMs, POS terminals, banknote processing systems, cashier's type machines for counting and inspection, as well as other computer programs.	30.11.2004
✓ Adaptation of banks' and other institutions' practices to the changes in the **EFT and EST** systems and transformation of **Internet Banking** programs.	31.12.2004
✓ **Conversion** of all TL accounts to YTL.	31.12.2004
✓ **Measures** for payments to be made in YTL, to the extent possible, during the period of co-circulation.	31.12.2004

IX- STEPS TO BE TAKEN

Companies and Tradesmen:

Steps to be taken	Estimated Date of Effect
✓ Harmonization of cash registers	31.10.2004
✓ Changes in the programs for inventory follow-up, accounting, cash operations, invoice and receipts, automatic scales and pricing.	31.10.2004
✓ Training to be given to cashiers on the security features of YTL banknotes.	31.12.2004
✓ Ensuring dual price tagging in TL and in YTL.	31.12.2004
✓ Acquiring information on how the commercial papers (bills, checks, etc.) will be issued.	31.12.2004

IX- STEPS TO BE TAKEN

In addition to the aforementioned institutions,

- ✓ **Banking Regulation and Supervision Agency (BDDK)**
- ✓ **Istanbul Stock Exchange (IMKB)**
- ✓ **Interbank Card Center (BKM)**
- ✓ **Istanbul Gold Exchange**
- ✓ **Intermediary institutions and**
- ✓ **Other institutions**

should perform necessary arrangements that fall within their scope of activities.

X- CONCLUSION

- ✓ Transition to New Turkish Lira (YTL) as of 01.01.2005, by removing 6 zeros from our currency, will be the indicator of our **determination** to bring inflation down to single-digits and maintain it.
- ✓ Since TL and YTL banknotes will co-circulate throughout the year 2005, there will be enough time for conversion to YTL banknotes. However, all accounts will have to be kept in terms of YTL starting from 01.01.2005.
- ✓ TL banknotes will be exchanged by YTL banknotes only at Central Bank branches throughout the 10-year' redemption period as of 01.01.2006. (Ziraat Bankası will carry out this task at cities where Central Bank does not have offices.)
- ✓ There is **an 11- month period** for the micro-level technical arrangements. All public and private sector bodies shall duly complete their preparations.
- ✓ Central Bank shall take all necessary measures and shall be in **coordination** with other related institutions at all levels.
- ✓ Technical details of the YTL banknotes will be announced towards the end of 2004.

X- CONCLUSION

- ✓ Every year, banknotes amounting to nearly 90% of the banknotes printed are destroyed due to factors such as persistent depreciation of our currency, lack of care in banknote handling and fast soiling.

  Greater care for banknote handling will improve the quality of our banknotes and thus reduce production costs.

- ✓ As stipulated in the Law, the rules for reproducing and publishing the illustrations and images on the banknotes shall be set by the Central Bank and will be announced in the Official Gazette.