

عمرو هشام العمري*

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Flexibility of Tax Structure Under its Theory Stages (Comparative Study)

Amro Hisham Al-Omari

Abstract

The tax structure of a country may be regarded as a reflection of its economic structure. It is affected by the country's level of economic and social progress., from that perspective, the tax structure, may serve as an instrument to depict the main characteristics of an economy and its level of development. More specifically, the flexibility of the tax structure particularly when relying on local resources to finance development, is an important symptom of economic development. This study aims to apply quantitative methods in the comparative analysis of the tax structure and the degree of its flexibility in three countries Egypt, Iran and the United Kingdom.

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The Tax Structure

(1)

(2)

repercussions

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Helzner)

1958

(3) (Colm

(2) Walter Hettich & Stanley L. Winer: 1988, Economic and Political Foundations Of Tax Structure , The American Economic Review , Vol.78 , No.4 , September , P.711.

(3) يونس أحمد البطريق ، النظم الضريبية ، مصدر سابق ، ص 186 - 190 .

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(Colm Helzner)

(1966 Hinrichs)

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⁽⁴⁾ Charles Mansfield , Tax Structure IN Developing Countries : 1971 , Finance and Development , No.1, march-, p.38.

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Musgrave

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Tax

(Revenue System

Tax Base

) Handle

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Presumptive Assessment

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Personal Income Tax

Progression

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Self employment

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Sales Tax

Corporation taxes

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clear-

(Voluntary assessment)

cut

Commodity taxes

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Visible

Smuggling

Indirect Taxation

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. Direct tax

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Pecuniary Economy

Transactions

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Egalitarian Philosophy

Capitalism

Feudal Pattern

. Fiscal Capacity

.Regressive

. Personal exemptions

. GNP

45	2005	-	-	
				()

.External trade

Pecuniary nature

;(5)

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- .2
- .3
- .4
- .5
- .6

Degree Of Urbanization

(6)

The Political Inclination

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;(7)

The Tax Burden

(1)

Horizontal Equity

Vertical Equity

Interference

(2)

(5) Charles Mansfield , Tax Structure IN Developing Countries , OPCIT,P.39.
 (6) Vito Tanzi & Carlos,A.Aguirre - 1981, Taxation In Sub-Saharan Africa ,Occasional Paper-8, IMF Washington D.C., OCT., P.48 .
 (7) Richard A.Musgrave & Peggy B. Musgrave:1982, , 3rd Edition , Public Finance in Theory & Practice , McGraw – Hill , International Book Company, p.235

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	46			

Investment Incentives (3)

Stabilization (4)

Nonarbitrary (5)

Efficiency

Trade off

Neutrality

Tax Elasticity

Tax Buoyancy ()

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(Discretionary Changes

(8)

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The Automatic Growth ()

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Factor Inputs

(9) Aggregate Tax Function

(8) Charles Mans Field 1972,, Elasticity and Buoyancy of a Tax System : A Method Applied to Paraguay, IMF Staff Paper , Vol. XLX, No.2, July, p.428 .

(9) Nurun N.Choudry : 1979, Measuring The Elasticity of Tax Revenue : A Divisia Index Approach, IMF Staff Paper Vol.26, No.1, March, P.29 .

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Tax

Technology given ()

system

(undisturbed)

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(shift)

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Discretionary changes

The Built-in Elasticity

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The Buoyancy of The Tax

⁽¹²⁾ "

:

$$\text{Log } T_i = \alpha + \beta \log Y_i$$

:

$$= Y_i$$

$$= T_i$$

$$= \beta$$

⁽¹⁰⁾ Ibid, p.90.

⁽¹¹⁾ Ibid, p.91 .

⁽¹²⁾ Nurun N.Choudry: 1975, A Study Of The Elasticity Of The West Malaysian Income Tax System, 1961 – 1973, IMF Staff Papers, No.2 , July, p.494 .

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= α

$$Y = C + I + G - T$$

$$T = \alpha Y$$

$$T = \alpha Y$$

A.R.Prest

1962

(13)

(Tax Elasticity)

response The built in

singer

Tax Buoyancy

(14)

$$\text{Log } X = \text{Log } d + B \text{ log } Y + F \text{ log } D$$

= X

GDP = Y

dummy variable = D

:

$$\text{Income Elasticity of Total Tax Revenue} = \beta$$

(Income Elasticity of Total Tax Revenue)

R.Chelliah

(15) Tax Revenue

(1981, Taxation)

(16) Vito Tanzi

in - Subsahran Africa)

$$(1) b = \frac{T_t - T_{t-1}}{Y_t - Y_{t-1}} \cdot \frac{(T_t + T_{t-1})/2}{(Y_t + Y_{t-1})/2}$$

:

= t-1

= t

= GDP

= T

(13) Charles Mans Field , Elasticity and Buoyancy of a Tax System , OPCIT, P.428- 429 .

(14) Mohsin ALI AL-Saadi1984 , Determinants Of The Time Pattern Of Government Spending in Developing Countries : The Case Of Iraq , PHD. Thesis (unpublished) , The University College Of Wales, Aderystwyth , July, .p.189.

(15) Raja J.Chelliah 1971, Trends In Taxation In Developing Countries , IMF Staff Paper , Vol.XVIII , No.2, .p.78.

(16) Vito Tanzi & Carlos,A.Aguirre , Taxation In Sub - Saharan Africa , OPCIT , p. 57 .

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= b

(2) $\beta = Gt/Gy$

:

= β
 = Gy
 = Gt

) Vito Tanzi
 Chellia

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(1)

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LOG GDP = 5.48+0.0784 N R2=91 77.15 13.86	LOG GDP = 4.3+ 0.0712 N R2=27.9 13.03 2.71	LOG GDP =2.81+0.0537 N R2=79.4 35.67 8.57	. 1
LOG T = 4.29+ 0.082 N R2=91.4 59.41 14.25	LOG T = 1.86+ 0.0608 N R2=20.3 5.36 2.2	LOG T = 1.54+ 0.0354 N R2=39.7 12.25 3.54	. 2
LOG Tid = 3.97+ 0.0759 N R2=90 54.33 13.05	LOG Tid = 1.36+ 0.0577 N R2=19.3 4.0 2.13	LOG Tid = 0.548 + 0.0519N R2=57.6 4.27 5.08	. 3
LOG Tid=3.03+0.095 N R2=93 40.3 15.9	LOG Tid= 0.926+0.0639 N R2=19.6 2.49 2.15	LOG Tid= 1.07+0.0225 N R2=19.4 8.08 2.14	. 4
LOG Tinc=3.58+0.0705 N R2=88.6 49.12 12.14	LOG Tinc= 0.649+ 0.0558 N R2=18.1 1.9 2.05	LOG Tinc= -0.4+0.0783 N R2=60.7 -2.2 5.41	. 5
LOG Tlgs=2.67+0.118 N R2=86.5 19.92 11.01	LOG Tlgs= -0.383+0.0727 N R2=28.3 -1.15 2.74	LOG Tlgs= -0.293+0.0463N R2=48.6 -2.25 4.46	. 6

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LOGT=-1.4+1.04 LOgGDP R ² =99.3 -10.89 51.52	LOGT=-2.48+0.987LOgGDP R2=97.2 -12.62 25.81	LOGT=-0.9+0.833 LOgGDP R2=80 -2.77 8.72	. 1
LOGTid = -1.35 + 0.97 LOgGDP R ² =99.3 -11.08 50.74	LOGTid = -2.86+0.956 LOgGDP R2=96.1 -12.55 21.58	LOGTid = -1.35 + 0.97 LOgGDP R2=89.7 -8.9 12.89	. 2
LOgTid=-3.48 +1.19 LOgGDP R ² =98.5 -16.32 35.54	LOgTid=-3.64 + 1.04 LOgGDP R2=93.8 -11.54 16.93	LOgTid=-0.88+0.646 LOgGDP R2=58.1 -2.05 5.14	. 3
LOGTinc=-1.36+0.9 LOgGDP R ² =97.8 -6.96 29.35	LOGTinc=-3.29+0.896 LOgGDP R2=84.8 -7.36 10.31	LOGTinc=-4.8+1.55 LOgGDP R2=86.1 -9.84 10.85	. 4
LOGTlgs=-5.55+1.5 LOgGDP R ² =94.9 -10.96 18.87	LOGTlgs=-4.42+0.953 LOgGDP R2=88.5 -10.92 12.1	LOGTlgs=-3.14+0.987 LOgGDP R2=84.3 -9.4 10.11	. 5

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- :
- = N
- = Tlgs
- = Tinc
- = T
- = Td
- = Tid

(1)

(7.83)

(7.27)

6

(11.8)

6

(1)

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(7.84)

.(5.37)

(7.12

(8.2)

. (7.59)

(9.51)

(7.83)

.(11.8)

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(2)

	مروية ض على السلع والخدمات	مروية ض على السلع والخدمات	مروية ض على السلع والخدمات	مروية ض على السلع والخدمات	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	مروية ضرائب غير مباشرة	b	b	b	b	b	b	
-	-	2.24	6.27	1.07	1.27	-	-	2.51	5.36	0.67	1.2	-	-	4.0	5.02	1.04	1.05	75
0.75	1.42	0.32	0.57	1.31	2.27	0.03	0.9	0.81	0.72	1.19	1.38	0.36	0.33	0.77	0.74	1.32	1.33	76
1.07	1.59	0.91	0.73	0.68	0.55	3.14	1.2	1.23	2.1	1.05	0.89	2.53	3.0	1.13	1.15	0.93	0.95	77
1.52	3.41	-1.5	-2.8	1.07	0.69	-0.2	1.8	0.82	-4.2	4.81	0.76	0.44	0.42	-2.2	-2.5	0.78	0.75	78
0.55	1.17	-3.0	-2.4	2.77	0.82	1.25	1.15	-2.6	-1.6	1.04	0.93	1.25	1.17	-1.9	-1.6	0.96	0.95	79
0.04	1.25	2.44	-10	1.66	1.15	0.41	0.9	4.64	-3.5	1.63	1.13	0.59	0.56	-2.2	-0.2	1.31	1.33	80
0.1	5.91	1.35	1.5	1.0	-0.5	2.32	4.2	-0.8	7.73	0.96	-0.1	3.18	3.59	4.2	5.0	0.25	0.25	81
0.98	0.41	2.38	-1.4	-0.5	0.03	0.84	0.91	1.4	-0.1	-0.5	0.1	0.85	0.84	0.4	0.4	-0.1	-0.1	82
2.7	1.1	0.65	0.62	1.11	1.4	0.68	0.83	1.57	0.43	1.19	1.85	0.78	0.76	0.93	0.95	1.64	1.62	83
0.64	-1.2	3.1	3.41	0.32	0.93	1.0	-0.1	0.82	2.81	0.34	1.31	0.45	0.43	1.9	1.98	1.0	1.0	84
1.52	1.2	20.9	16.1	1.41	1.45	1.5	1.11	5.23	9.14	1.38	1.12	1.35	1.26	5.67	5.95	1.2	1.2	85
0.08	1.81	0.3	1.0	0.98	0.76	0.4	1.59	0.25	0.75	1.0	0.9	1.0	1.0	0.56	0.53	0.96	0.94	86
0.44	-1.8	0.34	0.26	0.82	0.81	0.4	-1.1	1.03	0.63	0.83	0.85	1.1	1.1	0.76	0.74	0.84	0.83	87
1.37	1.11	-0.4	1.22	1.09	1.1	1.12	1.2	0.11	0.9	1.1	0.69	1.89	1.7	0.62	0.62	1.06	1.04	88
0.7	0.74	-0.7	-0.5	-4.2	5.58	0.57	0.48	1.92	0.04	-4.3	0.77	0.52	0.51	0.73	0.72	-1.0	-1.0	89
0.65	1.04	1.5	1.27	0.93	1.2	0.56	0.66	1.4	1.15	0.87	2.31	0.63	0.62	1.25	1.3	1.77	1.9	90
0.9	3.28	1.41	1.3	1.5	0.36	0.42	-1.2	1.45	1.23	1.5	0.83	-0.3	-0.3	1.32	1.4	1.04	1.05	91
2.6	1.98	1.03	1.5	1.17	-0.5	1.93	1.49	1.48	1.18	1.17	-0.2	1.67	1.83	1.32	1.4	0.27	0.26	92
1.13	0.81	0.53	1.0	1.05	1.72	1.13	1.13	1.1	1.0	1.02	1.46	1.12	1.21	1.05	1.02	1.31	1.29	93
-0.1	-0.1	-18.8	-2.2	0.24	0.26	-0.2	0.11	-14.6	10.9	0.25	0.25	-0.1	-0.1	-5.6	-6.7	0.26	0.24	94
1.83	1.47	0.02	1.05	2.31	3.08	2.1	1.57	-0.1	0.73	2.4	2.54	1.8	2.0	0.35	0.31	2.5	2.6	95
0.86	1.45	1.02	0.78	1.5	0.9	0.42	0.96	0.89	0.81	1.21	0.96	0.66	-	0.85	-	1.04	-	

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$$\dots : \dots (2) \dots (1)$$

$$\dots (\dots) \dots$$

$$\text{Vito Tanzi} \dots \beta \dots (2)$$

$$\text{(Vito Tanzi)} \dots ('b) \dots (\dots)$$

$$\dots) \dots \mathbf{b} \dots (3)$$

$$\dots \beta \dots (4)$$

$$\dots : \dots (\dots)$$

(17)

B

β

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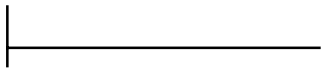
$$\dots (0.66) \dots - \beta \dots (5)$$

(0.96)

$$\beta \dots \beta \dots$$

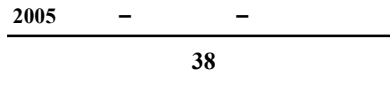
$$(1.45)$$

(17) Nurun N. Choudry, Measuring The Elasticity Of Tax Revenue, OPCIT, P. 103 .



(0.85)

β



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AL-Saadi , Mohsin ALI, 1984 Determinants Of The Time Pattern Of Government Spending in Developing Countries : The Case Of Iraq , PHD. Thesis (unpublished) , The University College Of Wales, Aderystwyth , July.

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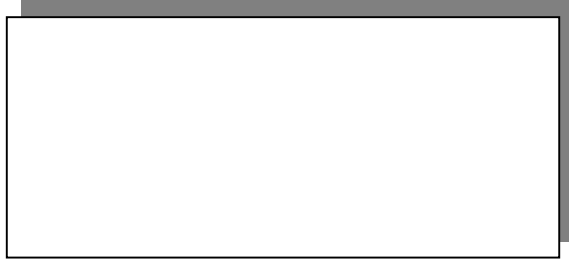
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(1)

Tlgs/T	Tinc/T	Tid/T	Td/T	Tid/GD	Td/GDP	T/GDP		GDP	
16.6	50.5	27.9	72.1	8.7	22.4	31.1	33.105	106.35	1975
16.8	49.2	28	72	8.7	22.1	30.8	39.032	126.71	1976
16.3	47.1	28.4	71.6	8.7	21.9	30.6	44.665	145.93	1977
17.4	46	28.5	71.5	8.3	20.7	29	48.834	168.44	1978
28.8	44.6	28.9	71.1	8.4	20.4	28.8	56.565	197.14	1979
31.7	43	31.8	68.2	9.9	21.1	31	71.567	231.21	1980
30.7	44.3	30.9	69.1	9.9	22	31.9	81.283	254.83	1981
31.5	43.1	31.8	68.2	10.8	23.3	34.1	94.802	277.61	1982
32.4	44	32.5	67.5	10.8	22.2	33	99.963	303.22	1983
33.8	44	33.9	66.1	1.2	21.8	33	106.519	323.02	1984
34.2	44.5	34.3	65.7	11.4	22	33.4	118.228	353.96	1985
34.5	43.1	34.6	65.4	11.4	21.6	33	125.171	378.85	1986
34.3	42.8	34.6	65.4	11	20.9	31.9	135.12	423.38	1987
34.5	43	34.8	65.2	11.2	21.1	32.3	152.523	471.43	1988
33.6	45	33.9	66.1	10.9	21	31.9	164.497	515.96	1989
32	43.5	32.1	67.9	10.7	22.7	33.4	184.329	551.12	1990
33.9	39.9	34	66	11.5	22.2	33.7	193.957	575.67	1991
35	38.6	35.1	64.9	11.5	21.3	32.8	196.338	598.92	1992
36	36.9	36.2	63.8	11.5	20.2	31.7	199.986	631	1993
36.1	37	36.2	63.8	11.5	20.2	31.7	199.986	669.07	1994
35.5	38.7	36	64	12.2	21.6	33.8	238	704.16	1995

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- International Monetary Fund , Government Financial Statistics., 1980, p.575.
- _____, _____, Year Book ,Vol. XIII , 1989, p.615.
- _____, _____, 1995, p.604.
- _____, _____, 1984, p.568.
- _____, _____, 1989, p.719.
- _____, International Financial Statistics, 1998, p.725.

(2)

Tlgs/T	Tinc/T	Tid/T	Td/T	Tid/GD	Td/GDP	T/GDP	T	GDP	
12.7	39.7	42.3	57.7	3.8	5.2	9	33.105	3.512	1975
11.3	36.8	42.9	57.1	3.6	4.8	8.4	39.0332	4.697	1976
11	33.6	44	56	3.8	4.9	8.7	44.665	5.948	1977
10.3	34.7	35	65	3.9	7.1	11	20	5.53	1978

8.9	32.6	32.4	67.6	2.3	5	7.3	56.565	6.335	1979
11.2	12.3	49.5	50.5	3.2	3.3	6.5	71.567	6.926	1980
8.8	34.3	33.2	66.8	3.2	5.7	8.5	81.283	8.323	1981
7.6	13	39.9	60.1	3	4.6	8.8	94.802	10.756	1982
12.2	22.3	46	54	3.4	4.1	7.5	99.963	13.75	1983
13	23.9	43.7	56.3	3.3	4.4	7.9	106.519	15.03	1984
17.6	29.4	39.4	60.6	3.5	5.3	8.8	118.228	15.306	1985
16.3	31.4	36	64	3.8	5	7.8	125.171	17.627	1986
14.8	31.1	38	62	2.8	4.6	7.4	135.12	19.949	1987
12.5	34	35.4	64.6	4.5	2.5	7	152.523	22.304	1988
10	24.6	43	57	3.8	2.9	6.7	164.497	27.787	1989
10.4	24.6	44.8	55.2	3.2	4	7.2	184.329	36.645	1990
10.8	24.6	46.6	53.4	3.8	4.3	8.1	193.957	50.107	1991
10	26.6	48.9	51.1	4.4	4.6	9	196.338	66.463	1992
9	36	28	72	1.8	4.2	6	199.986	93.61	1993
20.9	26.4	50	50	4.2	4.1	8.2	199.98	128.382	1994
18.5	33	54.5	55.5	3.1	3.6	6.7	238	178.875	1995

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- International Monetary Fund , Government Financial Statistics., 1980, p.269.
- _____, _____, Year Book ,Vol. XIII , 1989, p.346.
- _____, _____, 1985, p.330.
- _____, _____, 1984, p.568.
- _____, International Financial Statistics, Vol.XIII, Number,1989, p.421.
- _____, _____, 1998, p.364.

(3)

Tlgs/T	Tinc/T	Tid/T	Td/T	Tid/GD	Td/GDP	T/GDP	T	GDP	
18.1	10.5	64.7	35.3	16.7	9.2	25.8	1.357	5.247	1975
18.8	13.4	59.7	40.3	13.2	9	22.1	1.481	6.705	1976
14	11.1	69.4	30.6	21	9.3	30.3	2.49	8.21	1977
16.7	19	61.3	38.7	17	10.6	27.5	2.69	9.788	1978
21	19.4	60.4	39.6	15.5	10.1	25.6	3.227	12.61	1979
18.6	22	58	42	13.2	10	23.2	3.66	15.546	1980
13.7	29.6	53.3	46.7	15.6	13.6	29.2	5.006	17.149	1981
14	27.1	53.2	46.8	15	13.3	28.3	5.923	20.881	1982
19.3	28.7	52.3	47.7	14.3	13	27.3	6.783	24.834	1983
19.8	22.6	56.5	43.5	14.3	11	25.3	7.233	28.6	1984
18.6	23.9	52.5	47.5	17.4	11.5	24.3	8.272	34.211	1985
17.4	25.9	49.3	50.7	12.1	12.4	24.5	9.374	38.221	1986
19	24	50.8	49.2	9.7	9.4	19.1	9.823	51.5	1987
18.3	24.2	51.3	48.7	9.6	9.1	18.7	11.485	61.6	1988
18.5	24.8	51.7	48.3	9.4	8.6	18	13.692	76.8	1989
18.6	26.3	51	49	8.8	8.2	17	16.091	96.1	1990
17.2	31.3	48.5	51.5	9	9.4	18.4	20.446	111.2	1991
21.3	33.1	51.2	48.8	11.1	10.6	21.7	30.135	139.1	1992
21.4	32.2	51.2	48.8	11.3	10.7	22	34.479	157.3	1993
21.4	32.2	51.2	48.8	11.3	10.7	19.7	34.479	175	1994
21.3	30.4	52	48	11.8	10.7	22.5	46.143	205	1995

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