

THE EUROPEAN UNION, CYPRUS AND THE MIDDLE EAST: A COMPARISON OF EARNINGS AND PRICES (1985-1995)

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Abstract

Investment decisions are invariably based on the potential return to be earned from a particular venture. In today's world of global competition, enterprises have no choice but to maximise profits by minimising costs in order to ensure their long-term survival. Executives of multinational corporations are faced with a myriad of statistics regarding inputs and outputs. Yet the same statistics, if analysed properly, can give insights facilitating their decisions and expediting their operations. The main purpose of this paper is to compare and contrast personal incomes, price levels and exchange rates in the European Union, Cyprus and the Middle East. In this way an attempt is made to reveal their economic similarities and differences and thus assist multinational corporations, international organisations and national governments in their decision making.

Modern economic analysis exploits every available method and tool of mathematics and statistics. One of the most powerful languages of numbers is that of indices. Indices, like other statistical measures, are used to summarise any multitude of related numbers into more manageable and meaningful figures. Other more technically sophisticated approaches are available but I do not wish to alienate the non-specialist among us.

TABLE 1**GROSS SALARIES (12 OCCUPATIONS) INDEX (ZURICH= 100)**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	DENMARK	Copenhagen	87,5	83,3	84,4	98,0	1
2	GERMANY	Frankfurt	79,1	72,2	72,7	74,0	2
3	LUXEMBOURG	Luxembourg	78,4	69,0	59,7	71,0	4
4	AUSTRIA	Vienna	62,0	54,4	57,7	1,0	8
5	BELGIUM	Brussels	61,4	68,2	67,3	69,0	7
6	NETHERLANDS	Amsterdam	61,4	56,9	60,2	70,0	5
7	SWEDEN	Stockholm	55,5	69,1	64,5	70,0	6
8	FINLAND	Helsinki	52,8	75,5	57,8	74,0	3
9	FRANCE	Paris	51,9	48,1	43,9	56,0	11
10	ITALY	Milan	48,5	56,2	51,8	53,0	12
11	UN/D KINGDOM	London	47,9	45,5	57,9	57,0	10
12	IRELAND	Dublin	43,0	45,5	42,2	53,0	13
13	SPAIN	Madrid	42,0	49,8	28,7	41,0	15
14	ISRAEL	Tel Aviv	29,9	23,7	26,1	38,0	16
15	U.A.E. Abu Dhabi		29,9	00,0	17,4	61,0	9
16	GREECE	Athens	27,7	30,2	00,0	36,0	17
17	CYPRUS	Nicosia	27,4	26,5	23,8	32,0	18
18	PORTUGAL	Lisbon	23,1	17,9	13,3	17,0	19
19	BAHRAIN	Manama	20,7	00,0	30,5	42,0	14
20	EGYPT	Cairo	00,0	00,0	2,9	11,0	20

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

Indices of earnings and prices are used in international purchasing power comparisons. One of the most authoritative sources of such indices is the survey produced by the Union Bank of Switzerland (UBS) every three years and entitled *Prices and Earnings Around the Globe*. Its methodology is acclaimed for its objectivity and transparency. The UBS survey achieves uniformity of comparison by collecting the data and calculating the basket in the same manner in all countries_ In most countries it is conducted by two unrelated market research organisations. The survey contains more than 130 questions on prices and 10 questions on rents.

My analysis is based on 10 tables constructed from the UBS triennial surveys spanning the period 1985 to 1994. From the 47 countries located around the globe and covered by the survey, we will be focusing our attention on the current members of the European Union, Cyprus, Israel plus Bahrain, Egypt and the United Arab Emirates (UAE).

A country must meet simultaneously two criteria in order to be included in the survey. First, it must be a major business centre of interest to multinational investors and second, it must be without major market distortions arising from political, social or other problems. As a result of these criteria, no other Middle East country is included in this authoritative survey. During the 9 years under review even Turkey failed the above test.

Part I

In the first part there is a comparison of gross salaries, income tax and social security deductions and finally net salaries in the twenty countries during the period under review. The indices of *Table 1* refer to average salaries, expressed in the same currency and adjusted for hours worked, in the following twelve well defined occupations: (1) primary school teacher, (2) bus driver, (3) automobile mechanic, (4) construction worker, (5) skilled machinist, (6) department manager, (7) electrical engineer, (8) bank teller, (9) sales woman, (10) textile worker, (11) secretary and (12) cook_

TABLE 2**INCOME TAX & SOCIAL SECURITY AS% OF GROSS SALARY**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	DENMARK	Copenhagen	38,5	40,0	41,7	46,8	1
2	BELGIUM	Brussels	36,1	40,6	33,0	29,5	7
3	GERMANY	Frankfurt	34,6	33,6	35,2	33,5	5
4	FINLAND	Helsinki	32,0	29,4	29,4	39,8	2
5	NETHERLANDS	Amsterdam	31,5	31,4	36,2	32,3	6
6	UN/D KINGDOM	London	31,3	18,7	27,6	29,5	8
7	ITALY	Milan	31,1	24,6	26,4	23,3	12
8	SWEDEN	Stockholm	29,0	55,0	33,8	34,4	3
9	AUSTRIA	Vienna	26,4	25,0	28,8	28,3	9
10	IRELAND	Dublin	25,0	27,3	29,8	27,7	10
11	FRANCE	Paris	24,6	24,3	21,2	22,8	13
12	ISRAEL	Tel Aviv	21, 1	9,0	26,3	34,1	4
13	PORTUGAL	Lisbon	20,5	14,4	17,4	20,5	15
14	CYPRUS	Nicosia	20,3	13,7	15,2	15,3	18
15	LUXEMBOURG	Luxembourg	19,4	18,3	21,7	26,3	11
16	GREECE	Athens	18,9	19,9	19,1	18,5	16
17	SPAIN	Madrid	18,1	18,3	15,2	22,6	14
18	BAHRAIN	Manama	5,0	00,0	7,1	5,2	19
19	EGYPT	Cairo	00,0	00,0	10,9	16,2	17
20	U.A.E.	Abu Dhabi	00,0	00,0	00,0	00,0	20

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

It should be noted that in this and some other tables, no figures are included for Egypt during 1994 and 1991 as well as for Bahrain and the UAE during 1991 for reasons already mentioned. Allowing for this omission, one can see at once that the highest gross salaries are paid in Denmark and the lowest in Egypt. The 1994 (unweighted) average gross salary in the European Union was US\$22.387, which corresponded to 54,8% of the average gross salary in Switzerland.

The set of the fifteen European Union countries is not disjointed from the set of the other five countries. The intersection of the two sets includes Israel, UAE, Greece, Cyprus and Portugal. Indeed, Cyprus with an index of 27,7 is sandwiched between Greece and Portugal. Thus, with the exception of Bahrain and Egypt, the other countries face gross labour costs similar to those prevailing in the Mediterranean members of the European Union.

Depending on whether countries experience higher or lower than average real productivity, wage settlements or currency appreciation, they move up or down the ladder. During the nine years under review, Austria experienced the greatest inflation of gross salaries rising from the 8th to the 4th position, while the UAE suffered the least inflation falling from the 9th to the 15th position. Gross salaries in Cyprus and Israel increased faster than the average of the twenty countries so that they both moved up in rank during the period under review. This development, if left unchecked, will drive away their labour intensive industry to other Middle East or Mediterranean basin countries.

Table 2 shows the percentages of gross salaries that are deducted in respect of income tax and social security in the twenty countries under review. Currently, this direct deduction rate ranges between a high of 38,5% in Denmark to a low of zero percent in the UAE. The sets of the European Union and the non-member countries are again joined with their intersection containing six countries. These are Israel, Portugal, Cyprus, Luxembourg, Greece and Spain.

From 1985 to 1994 deductions in respect of income tax and social security decreased the most in Sweden and Israel. Their ranks dropped from the 3rd and 4th most heavily taxed countries to the 8th and 12th positions, respectively. During the same nine years such deductions increased the most in Belgium and Italy. Their ranks rose from the 9th and 12th to the 2nd and 7th most heavily taxed countries, respectively.

TABLE 3**NET SALARIES (12 OCCUPATIONS) INDEX (ZURICH=100)**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	LUXEMBOURG	Luxembourg	80,4	71,1	58,4	67,0	2
2	DENMARK	Copenhagen	68,3	62,9	61,5	66,0	3
3	GERMANY	Frankfurt	66,4	60,4	58,9	63,0	4
4	AUSTRIA	Vienna	57,4	51,3	51,4	56,0	10
5	NETHERLANDS	Amsterdam	53,7	49,0	48,0	61,0	6
6	SWEDEN	Stockholm	49,9	39,2	53,4	59,0	7
7	FRANCE	Paris	49,6	45,9	43,3	56,0	8
8	BELGIUM	Brussels	49,5	50,5	56,4	63,0	5
9	FINLAND	Helsinki	45,0	66,6	51,0	57,0	9
10	SPAIN	Madrid	42,6	50,0	30,5	41,0	15
11	ITALY	Milan	42,2	53,3	47,7	52,0	11
12	UN/D KINGDOM	London	41,7	46,2	52,4	51,0	13
13	IRELAND	Dublin	40,8	41,4	37,0	48,0	14
14	U.A.E.	Abu Dhabi	38,0	00,0	21,7	78,0	1
15	GREECE	Athens	28,5	30,4	00,0	37,0	16
16	ISRAEL	Te/Aviv	27,5	27,0	24,0	32,0	18
17	CYPRUS	Nicosia	27,4	28,3	25,2	35,5	17
18	BAHRAIN	Manama	25,1	00,0	35,4	52,0	12
19	PORTUGAL	Lisbon	23,1	18,8	13,8	17,0	19
20	EGYPT	Cairo	00,0	00,0	3,3	11,0	20

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

Cyprus has been among the countries where such direct deductions have been rising faster than the average for the twenty countries under review. Although its rank has moved upward from the 18th position in 1985 to the 14th position in 1994, its direct deduction rate remains well below the European Union average of 27,8%. Direct deduction rates in Bahrain, Egypt and the UAE are entirely outside the range of those in the European Union. This fact is not accidental but reflects to a large extent their governments' different philosophies or approaches regarding fiscal and social policies.

Table 3 adjusts gross incomes for income tax and social security deductions and ranks the 20 countries in respect of net "take home" salaries. The highest net incomes are received in Luxembourg and the lowest in Egypt. In 1994 the European Union (unweighted) average net salary was US\$15.205 which represented 46,9% of the corresponding Swiss average.

One can see that again, there is substantial overlap between the set of the European Union with the set of the other countries under comparison. Their intersection contains six countries, i.e., UAE, Greece Israel, Cyprus, Bahrain and Portugal. Only Egypt falls outside the intersection signifying the tremendous gap that separates net "take home" salaries in this country from those prevailing in the other nineteen countries. If other conditions were favourable, it would be the best location for labour intensive industry.

Part II

Having dealt with two widely accepted measures of nominal income, at the second part of this paper, there is an attempt to compare prices for goods, services and housing in the twenty countries.

The basket consists of 108 goods and services and three rent categories. It is based on the average consumer habits of a European family of three. The weights accorded to the various groups of expenditure are as follows: food products 20%, various services 16%, transport 14%, personal care products 8%, clothing 7%, household appliances 7%, beverages and tobacco 5%, heating and electricity 5% and finally, rents 18% (if not excluded from the calculation).

TABLE 4**TOTAL EXPENDITURE (GOODS & SERVICES) IN U.S. DOLLARS**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	DENMARK	Copenhagen	1.842	1.594	1.680	1.050	5
2	SWEDEN	Stockholm	1.697	1.944	1.710	1.070	4
3	FRANCE	Paris	1.650	1.425	1.250	790	15
4	FINLAND	Helsinki	1.597	1.984	1.820	1.260	3
5	GERMANY	Frankfurt	1.529	1.300	1.250	820	13
6	AUSTRIA	Vienna	1.518	1.361	1.310	840	12
7	BELGIUM	Brussels	1.398	1.288	1.200	860	10
8	U.A.E.	Abu Dhabi	1.388	0	1.240	1.580	1
9	LUXEMBOURG	Luxembourg	1.371	1.241	1.100	690	18
10	UN/D KINGDOM	London	1.354	1.470	1.320	890	9
11	NETHERLANDS	Amsterdam	1.339	1.145	1.120	710	17
12	ISRAEL	Tel Aviv	1.312	1.175	1.140	1.000	6
13	ITALY	Milan	1.253	1.431	1.230	820	14
14	IRELAND	Dublin	1.233	1.326	1.320	910	8
15	BAHRAIN	Manama	1.206	0	1.180	1.360	2
16	SPAIN	Madrid	1.180	1.638	1.270	850	11
17	GREECE	Athens	1.059	940	990	750	16
18	PORTUG,AL	Lisbon	1.001	980	910	610	20
19	CYPRUS	Nicosia	972	836	840	750	19
20	EGYPT	Cairo	948	648	910	1.000	7

Source: UBS, *Prices and Earnings Around the Globe*

(1994, 1991, 1988, 1985 editions)

Table 4 shows that the prices of the entire basket (excluding rents) is only two times higher in Copenhagen than in Cairo. The (unweighted) average price for the basket is US\$1.401,40. With regard to prices, the intersection of the European Union set with that of the other countries consists of eleven countries which is much larger than the intersection of salaries proving that in today's world with its legal, cultural and other immigration barriers, goods are more internationally mobile than labour. Only Cyprus and Egypt fall outside the intersection, being less expensive than Portugal, the least Expensive European Union country.

The tendency for the price equalisation of internationally traded goods and services is one of the most widely accepted and deeply ingrained concepts in economics. Such price equalisation, especially in today's world of instant communications can be slowed down only by strong policy, legal, institutional or even cultural forces distorting or preventing the functioning of the full market mechanism.

Table 5 represents the figures of *Table 4* in the form of index numbers. Here we may focus on changes of rank as a result of internal and external economic pressures. Mainly as a result of relative exchange rate appreciation, we see France, Luxembourg and Germany moving from the 15th, 13th and 19th positions, respectively, in 1985 to the 3rd, 5th and 9th most expensive countries in 1994. On the other hand, as a result of the dramatic reversal in the Middle East oil producers' fortunes, we see the UAE, Bahrain and Egypt moving from the 1st, 2nd and 6th most expensive countries in 1985 to the 8th, 15th and 20th positions in 1994. During the nine year period under review Israel and Cyprus also experienced inflation at rates substantially below the average so that their ranks fell from the 7th and 17th positions to the 12th and 19th least expensive among the twenty countries surveyed.

Table 6 incorporates in the basket the cost of housing, as reflected by the three rent categories, accorded a weight of 18%. This time at the two extremes we have Denmark and Cyprus. Paradoxically, as it may seem, when good quality housing is added in the basket, its price variation around the world is decreased rather than increased. The intersection of the European Union set with the other set includes fourteen out of the total of twenty countries. By comparing *Table 5* (which excludes rents) with *Table 6* (which includes rents) one can easily ascertain which of the twenty countries have relative scarcity or abundance of good quality housing. At the two extremes, when rents are taken into account, Belgium's rank improves by three positions. (dropping from the 7th most expensive country to 10th), while Egypt's rank deteriorates by three positions (rising from the 20th to the 17th most expensive country). Cyprus's rank drops from the 19th to the 20th position confirming that overall it is the least expensive business centre in the combined set of European Union and Middle East countries. This is particularly important in view of Cyprus' goal of attracting multinational corporations and international organisations to establish their regional or worldwide headquarters on the island.

TABLE 5**PRICES (EXCLUDING RENTS) INDEX (ZURICH=100)**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	DENMARK	Copenhagen	94,7	91,3	102,1	109,0	5
2	SWEDEN	Stockholm	87,2	111,3	104,1	112,0	4
3	FRANCE	Paris	84,8	81,6	76,2	82,0	15
4	FINLAND	Helsinki	82,1	113,6	110,5	130,0	3
5	GERMANY	Frankfurt	78,6	74,5	76,1	85,0	13
6	AUSTRIA	Vienna	78,0	78,0	79,4	87,0	12
7	BELGIUM	Brussels	71,8	73,8	73,0	89,0	10
8	U.A.E.	Abu Dhabi	71,3	00,0	75,2	164,0	1
9	LUXEMBOURG	Luxembourg	70,4	71,1	66,9	71,0	19
10	UN/D KINGDOM	London	69,6	84,2	80,2	93,0	9
11	NETHERLANDS	Amsterdam	68,8	65,6	68,4	73,0	18
12	ISRAEL	Tel Aviv	67,4	67,3	69,5	104,0	7
13	ITALY	Milan	64,4	82,0	74,5	85,0	14
14	IRELAND	Dublin	63,4	76,0	80,5	94,0	8
15	BAHRAIN	Manama	62,0	00,0	71,6	141,0	2
16	SPAIN	Madrid	60,6	93,8	77,3	88,0	11
17	GREECE	Athens	54,4	53,8	60,2	78,0	16
18	PORTUGAL	Lisbon	51,4	56,2	55,6	63,0	20
19	CYPRUS	Nicosia	49,9	47,9	51,2	77,0	17
20	EGYPT	Cairo	48,7	37,1	49,0	104,0	6

Source: UBS, *Prices and Earnings Around the Globe*

(1994, 1991, 1988, 1985 editions)

TABLE 6

PRICES (INCLUDING RENTS) INDEX (ZURICH=100)

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	DENMARK	Copenhagen	92,0	89,6	95,5	101,0	6
2	FRANCE	Paris	87,0	82,4	81,0	92,0	9
3	SWEDEN	Stockholm	85,2	105,6	105,6	102,0	5
4	GERMANY	Frankfurt	79,8	79,8	79,8	87,0	12
5	FINLAND	Helsinki	79,3	108,3	108,3	120,0	4
6	U.A.E.	Abu Dhabi	78,1	00,0	00,0	212,0	1
7	AUSTRIA	Vienna	77,0	75,4	75,4	83,0	15
8	LUXEMBOURG	Luxembourg	75,2	75,7	75,7	78,0	17
9	UN/D KINGDOM	London	74,1	93,6	93,6	100,0	7
10	BELGIUM	Brussels	72,0	72,2	72,2	92,0	10
11	ITALY	Milan	70,4	86,8	86,8	84,0	13
12	NETHERLANDS	Amsterdam	70,3	65,7	65,7	74,0	19
13	ISRAEL	Tel Aviv	65,8	64,9	64,9	98,0	8
14	SPAIN	Madrid	63,,5	100,7	100,7	84,0	14
15	BAHRAIN	Manama	63,4	00,0	00,0	171,0	2
16	IRELAND	Dublin	62,,6	74,2	74,2	89,0	11
17	EGYPT	Cairo	56,5	47,2	47,2	114,0	3
18	GREECE	Athens	56,7	55,6	55,6	82,0	16
19	PORTUGAL	Lisbon	55,9	58,4	58,4	61,0	20
20	CYPRUS	Nicosia	48,5	47,2	47,2	74,0	18

Source: *UBS, Prices and Earnings Around the Globe*

(1994, 1991, 1988, 1985 editions)

Part III

In the third part there is an examination of the domestic purchasing power of gross and net salaries in the European Union, Cyprus and the Middle East.

In order to estimate purchasing power one divides the level of income by the cost of the basket. This ratio shows how many baskets or proportion of a basket can be bought with the income earned. The ratios for the various countries are reestimated as index numbers with Zurich in Switzerland granted the value 100 for purposes of comparison. In estimating the purchasing power of gross net incomes the UBS Survey takes into account only the basket of goods and services.

Table 7 relates gross salaries to the cost of the basket. Due to reasons already mentioned no surveys were conducted in Egypt in 1991 and 1994. Yet one can easily see that Luxembourg has now risen on top while Egypt has stayed at the bottom of the league. The most striking discovery here is that the intersection of the European Union with the other set contains three countries, i.e., Cyprus, Greece and Portugal.

Among the non-member countries under comparison only in Cyprus are real incomes within the range of those prevailing in the European Union. Cyprus is sandwiched between France and Greece. Furthermore, during the period 1985 to 1994 Cyprus' rank improved from 15th to 14th proving that the island achieved higher than average real growth rates.

Table 8 relates net salaries to the cost of the basket. Luxembourg and Egypt remain at the two extremes. The intersection of the European Union with the other set contains five countries: Cyprus, Finland, UAE, Greece and Portugal. As already mentioned, in the UAE there are no deductions in respect of income tax and social security. Thus, due to higher net income, its rank could not but rise relatively to the other countries. Under this measure of domestic purchasing power, Cyprus lies between Sweden and Finland, two members of the European Union. However, it is worth noting that private income in Sweden and Finland is augmented by public goods and social services to a greater extent than it is in our Mediterranean island.

TABLE 7
DOMESTIC PURCHASING POWER (GROSS) INDEX
(ZURICH=100)

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	LUXEMBOURG	Luxembourg	111,2	97,0	89,2	100,0	1
2	GERMANY	Frankfurt	100,7	97,0	95,5	87,0	4
3	DENMARK	Copenhagen	92,4	91,2	82,7	90,0	3
4	NETHERLANDS	Amsterdam	89,3	86,7	88,1	96,0	2
5	BELGIUM	Brussels	85,5	92,4	92,2	78,0	5
6	AUSTRIA	Vienna	79,5	69,8	72,6	70,0	6
7	ITALY	Milan	75,3	68,6	69,5	63,0	8
8	SPAIN	Madrid	69,3	53,1	37,2	47,0	13
9	UN/D KINGDOM	London	68,8	54,1	72,2	62,0	10
10	IRELAND	Dublin	67,9	59,9	52,4	56,0	12
11	FINLAND	Helsinki	64,3	66,4	52,4	57,0	11
12	SWEDEN	Stockholm	63,7	62,0	62,0	62,0	9
13	FRANCE	Paris	61,2	59,0	57,6	69,0	7
14	CYPRUS	<i>Nicosia</i>	<i>54,8</i>	<i>55,3</i>	<i>46,5</i>	<i>42,0</i>	15
15	GREECE	Athens	50,9	56,1	00,0	46,0	14
16	PORTUGAL	Lisbon	44,9	31,9	24,0	28,0	19
17	<i>ISRAEL</i>	<i>Tel Aviv</i>	<i>44,4</i>	<i>35,1</i>	<i>37,5</i>	<i>36,0</i>	17
18	U.A.E.	Abu Dhabi	42,0	00,0	23,1	37,0	16
19	BAHRAIN	<i>Manama</i>	33,5	00,0	46,6	30,0	18
20	<i>EGYPT</i>	<i>Cairo</i>	00,0	00,0	6,0	11,0	20

Source: *UBS, Prices and Earnings Around the Globe*
 {1994, 1991, 1988, 1985 editions}

Table 9 is a summary of the fluctuations in the purchasing power rank of the twenty countries from 1985 to 1994. It reflects (1) labour productivity (2) technological innovation (3) exchange rates (4) fiscal policy (5) natural disasters (6) military conflicts and all other factors affecting the relative real development of an economy *vis-a-vis* other countries. *Table 9* also shows, among other things, which countries succeeded in sailing on an even keel during the turbulent nine years under review. Taking the standard deviation as our measure of dispersion, we see that with regard to relative real income the most stable countries were Luxembourg, Egypt, Germany and the Netherlands while the most unstable were Spain, Bahrain, the United Kingdom and Sweden.

Part IV

In the final part there is a focus on the concept of Purchasing Power Parity (PPP) and consideration of its applicability in the cases at hand. The idea of PPP is based on the simple premise that goods and services which are mobile and therefore freely traded internationally, will eventually demand the same price everywhere in the world. If in any country their prices rise or fall, because of relative shortage or abundance, ensuing international trade and payment flows will restore equilibrium. Therefore, in the long run, we should observe a convergence of basket prices. In reality such convergence does not occur as rapidly as one would expect. Trade and payment flows continue unabated because of never fully resolved or continuously revived price differences.

According to the theory of PPP, for every country exists an exchange rate which would make the price of its basket equal to the world average. By comparing the "actual" with the "equilibrium" exchange rate, one can see whether and to what extent its currency is over or undervalued.

Naturally, not all currencies can be overvalued or undervalued at the same time. By definition, the overvalued currencies must balance the undervalued ones. For example, a close examination of the 1994 UBS Survey, and in particular of its very last table appearing on page 42, reveals that in the same year only three currencies around the world were overvalued. These were the U.S. Dollar, the Japanese Yen and the Norwegian Krone. Their combined weight in world trade and payments balanced all undervalued currencies!

TABLES**DOMESTIC PURCHASING POWER (NET) INDEX (ZURICH=100)**

RANK	COUNTRY	City	1994	1991	1988	1985	RANK
1	LUXEMBOURG	Luxembourg	114,1	100,0	87,3	94,0	1
2	GERMANY	Frankfurt	84,4	81,2	77,3	74,0	3
3	NETHERLANDS	Amsterdam	78,0	74,8	70,2	83,0	2
4	AUSTRIA	Vienna	73,6	65,8	64,7	65,0	6
5	DENMARK	Copenhagen	72,1	68,9	60,2	61,0	7
6	SPAIN	Madrid	70,3	53,3	39,4	46,0	14
7	BELGIUM	Brussels	68,9	68,4	77,3	70,0	4
8	ITALY	Milan	65,6	65,0	63,9	61,0	8
9	IRELAND	Dublin	64,4	54,5	46,0	52,0	10
10	UN/D KINGDOM	London	59,9	54,9	65,4	56,0	9
11	FRANCE	Paris	58,6	56,2	56,8	68,0	5
12	SWEDEN	Stockholm	57,3	35,2	51,3	52,0	11
13	CYPRUS	<i>Nicosia</i>	<i>54,9</i>	<i>59,2</i>	<i>49,3</i>	<i>45,0</i>	15
14	FINLAND	Helsinki	54,8	58,6	46,2	44,0	16
15	U.A.E.	Abu Dhabi	<i>53,3</i>	<i>00,0</i>	<i>28,9</i>	<i>48,0</i>	12
16	GREECE	Athens	52,4	56,4	00,0	48,0	13
17	PORTUGAL	Lisbon	44,9	33,6	24,8	28,0	19
18	ISRAEL	<i>Tel Aviv</i>	<i>40,8</i>	<i>40,1</i>	<i>34,5</i>	<i>31,0</i>	18
19	BAHRAIN	<i>Manama</i>	<i>40,4</i>	<i>00,0</i>	<i>49,4</i>	<i>37,0</i>	17
20	EGYPT	<i>Cairo</i>	<i>00,0</i>	<i>00,0</i>	<i>6,6</i>	<i>10,0</i>	20

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

Table 10 is the mirror image of *Tables 4* and *5*. One can see that during the 9 year period under review, most currencies tended to move further and further from equilibrium unless there was drastic change in government policy, as in the cases of Denmark, Sweden and Finland. Even with such corrections, all 20 currencies were more undervalued in 1994 than in 1985.

It is apparent that in all countries there exist major policy, legal, institutional and even cultural forces preventing the convergence towards PPP equilibrium. Among such forces one may mention trade quotas, protective tariffs, hidden subsidies, price controls, closed shops, indexation of contracts, barriers to entry and other free market distorting practices. Each practice corresponds to a distortion of income distribution in favour of the stronger and against the weaker pressure groups affected by it. Therefore, any attempt to abolish any of them implies a political confrontation with those benefiting from it, something which is easier said than done. In addition, one should not forget that a country's economic policies often tend to be cancelled by policies adopted by other countries in order to avoid disruption of their domestic political balances.

According to the PPP measurement of prices, the currencies of Cyprus and Egypt are more than 100% undervalued. Does this mean they should be allowed to appreciate? From what we have already said, it is apparent that such appreciations will be sustained only if they are implemented with the consent or tacit agreement of those domestic groups and foreign countries likely to be affected by them. Otherwise they will be temporary phenomena, neutralised by problems created by the ensuing domestic deflation and declining external competitiveness for both countries. Furthermore, the PPP measurement does not take into account the portfolio allocation of investments, which is of paramount importance in a world of capital mobility.

TABLE 9

RANK OF DOMESTIC PURCHASING POWER

COUNTRY	City	1994	1991	1988	1985
LUXEMBOURG	Luxembourg	1	1	1	1
GERMANY	Frankfurt	2	2	2	3
NETHERLANDS	Amsterdam	3	3	3	2
AUSTRIA	Vienna	4	6	6	6
DENMARK	Copenhagen	5	4	8	7
SPAIN	Madrid	6	115	16	14
BELGIUM	Brussels	7	5	4	4
ITALY	Milan	8	7	7	8
IRELAND	Dublin	9	14	15	10
UN/D KINGDOM	London	10	13	5	9
FRANCE	Paris	11	11	9	5
SWEDEN	Stockholm	12	17	10	11
CYPRUS	<i>Nicosia</i>	<i>13</i>	<i>8</i>	<i>13</i>	<i>15</i>
FINLAND	Helsinki	14	9	14	16
U.A.E.	Abu Dhabi	<i>15</i>	<i>18</i>	<i>18</i>	<i>12</i>
GREECE	Athens	16	10	12	13
PORTUGAL	Lisbon	17	17	19	19
ISRAEL	<i>Tel Aviv</i>	<i>18</i>	<i>16</i>	<i>17</i>	<i>18</i>
BAHRAIN	<i>Manama</i>	<i>19</i>	<i>19</i>	<i>11</i>	<i>17</i>
EGYPT	<i>Cairo</i>	<i>20</i>	<i>20</i>	<i>20</i>	<i>20</i>

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

Conclusion

In conclusion, it may be emphasized that under all criteria the two sets of countries intersect. Their common similarities and complementary differences point to their present and potential cooperation. Cyprus falls within the intersection of the two groups every time except in respect of the price level of its goods, services and housing. Yet, even this exception confirms that the island is the ideal location for the establishment of regional or worldwide headquarters by multinational corporations and international organisations linking the two groups of countries.

A promising new scene appears to be forming here in our region. If allowed to develop, it could be accompanied by significant economic rearrangements and other opportunities for enterprises and people. The new scene has been fostered:

- (a) by the ongoing peace process between Israel and its Arab neighbours which started with the Camp David Agreement in 1978
- (b) by the failure of central planning and the universal acceptance of the free market principles since 1989, and
- (c) by the European Union's decision to begin accession talks with Cyprus six months after the end of the intergovernmental conference in 1997.

TABLE 10

**EXCHANGE RATES (PPP)% UNDER(+) OVER(-) VALUED
VIS U.S. DOLLAR**

COUNTRY	City	1994	1991	1988	1985	
1 EGYPT	Cairo	105,3	124,6	64,0	-3,8	14
2 CYPRUS	Nicosia	100,4	73,9	56,2	29,8	4
3 PORTUGAL	Lisbon	98,4	46,9	43,8	58,7	1
4 GREECE	Athens	83,9	54,7	32,4	28,2	5
5 SPAIN	Madrid	65,0	-10,9	3,4	13,6	10
6 BAHRAIN	Manama	61,3	00,0	11,6	-29,1	19
7 IRELAND	Dublin	57,7	9,6	-0,7	6,4	13
8 ITALY	Milan	55,7	00,0	12,5	17,6	7
9 /\$RAEL	Tel Aviv	48,4	23,8	14,9	-3,8	15
10 NETHERLANDS	Amsterdam	45,3	27,0	16,9	37,0	3
11 UN/D KINGDOM	London	43,7	-1,1	-0,4	7,5	12
12 LUXEMBOURG	Luxembourg	42,0	17,2	19,2	40,8	2
13 U.A.E.	Abu Dhabi	40,2	00,0	6,3	-39,0	20
14 BELGIUM	Brussels	39,2	12,9	9,5	12,4	11
15 AUSTRIA	Vienna	28,2	6,7	0,6	14,9	9
16 GERMANY	Frankfurt	27,2	11,8	4,9	17,6	8
17 FINLAND	Helsinki	21,8	-26,7	-27,7	-23,1	18
18 FRANCE	Paris	17,9	2,1	4,8	21,9	6
19 SWEDEN	Stockholm	14,7	-25,1	-23,2	-10,7	17
20 DENMARK	Copenhagen	5,6	-8,8	-21,7	-8,2	16

Source: UBS, *Prices and Earnings Around the Globe*
(1994, 1991, 1988, 1985 editions)

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