# A Recent Contribution to Trade Cycle Theory [1]

by

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There have always been two schools of thought on the problem of the trade cycle: there are those who maintain that there is no such thing as « the » trade cycle, but that each fluctuation in economic activity is distinct from every other both in its causes and its effects. Hence it is maintained that theorising on this problem is fruitless, each cycle must be considered as unique and explained by a different set of factors.

Trade cycle theorists on the other hand maintain that, while undoubtedly cycles differ both in duration, amplitude and causes, they are sufficiently regular in occurrence and exhibit sufficient similarity, to enable us to make fruitful generalisations. Amongst this latter group of economists must be placed all those, including the writer under review, who have produced « endogenous » theories of industrial fluctuations.

An endogenous theory of the trade cycle is one, which explains the occurrence of fluctuations in terms of forces generated from within the economic system itself. As distinct from these, « exogenous » theories rely either on forces wholly unconnected with the economic system (*e.g.* Jevon's Sun Spot theory) or on forces which cannot adequately be explained in terms of the significant economic variables (*e.g.* new inventions, etc.). Hicks' theory of the trade cycle is endogenous *par excellence*. That is to say while certain exogenous (autonomous) variables enter into his system, they are on the whole either systematic or unnecessary to his theory.

Hicks' theory is in direct line of descent from Harrod's dynamics (2), in its economics, and from Frisch (3) and Samuelson (4) in its technique. Before analysing it in detail it may be useful to say something about Harrod's theory and we shall then be in a better position to understand how Hicks deals with some of its shortcomings.

(1) J. R. Hicks: *A Contribution to the Theory of the Trade Cycle*, Oxford, 1950.

(2) R.F. Harrod: *Towards a Dynamic Economics*, MacMillan, 1948.

(3) R. Frisch: « Propagation Problems and Impulse Problems in Dynamic Economics », *Economic Essays in Honour of Gustav Cassel*, London, 1933.

(4) P. Samuelson: *Foundations of Economic Analysis*, Part II, Cambridge (Harvard), 1947. Also, *Interactions between the Multiplier Analysis and the Principle of Acceleration*, « Review of Economic Statistics », Vol. XX, May 1939.

## I

The problem of the trade cycle is essentially one of economic dynamics. Without entering into any definitional controversy, we may say that this implies that time is made an explicit (significant) variable of the economic system or more precisely that economic variables of different dates are significant to the theory (5). In particular this becomes important when either adjustments cannot be taken to occur instantaneously and/or the value of variables at some future date cannot be neglected, and/or when the rate of change of certain variables rather than their absolute value is important.

Mr. Harrod, as is well known, was amongst the earliest exponents of the accelerator principle (6). According to the latter an important part of investment demand may be regarded as a function of the rate of change of income. This principle may be interpreted in two ways: (a) either we say that the amount of investment induced by a given change in income is the amount necessary to produce it. In that case the inverse of the accelerator is the marginal efficiency of capital. ($\Delta c = \alpha \Delta Y$; $\frac{\Delta Y}{\Delta c} = \frac{1}{\alpha}$ when $\Delta c$ is the increase in capital, $\Delta Y$ the increase in income); or (b) we may regard entrepreneurial expectations as to the future to be a function of $\Delta Y$ and hence the amount of investment induced by it may be more or less than what is necessary to produce this increase. Both Hicks and Harrod are exclusively concerned with the accelerator of type (a) and we shall have occasion to criticise this later on.

On the basis of the accelerator Harrod is able to « dynamise » the familiar Keynesian equations. There will be two main types of such equations: (i) an *ex ante* equation showing the equilibrium condition of *ex ante* savings equal to *ex ante* investment and (ii) an *ex post* equation showing that *ex post* savings are always equal to investment. We have

$$\left(\frac{dY}{dt}\right)_\omega \alpha_\omega = sY \qquad 1.1$$

$$\left(\frac{dY}{dt}\right)_a \alpha = sY \qquad 1.2$$

(5) P. Samuelson: *Foundations*, pp. 311-320.

(6) R. F. Harrod: *The Trade Cycle*, *op. cit.*

where $\left(\frac{dY}{dt}\right)_\omega$ is that « warranted » rate of growth of income which will make *ex ante* investment (given $\alpha_\omega$ = the warranted, or required, or *ex ante*, accelerator) equal to *ex ante* savings. $\left(\frac{dY}{dt}\right)_a$ is the actual rate of growth and $\alpha$ is the accelerator which will equate savings to investment *ex post*. $\alpha$ in 1.2 thus includes induced accumulation and decumulation of stocks.

To these two basic equations Harrod adds a third which is based neither on the warranted nor actual rate of growth of income, but on what he calls the « natural » rate of growth. The latter is defined as the maximum rate of growth in income possible in given physical conditions and with given technical knowledge. We have

$$\left(\frac{dY}{dt}\right)_a \alpha = sY \qquad 1.3$$

$$\left[\text{where } \left(\frac{dY}{dt}\right)_a = \text{the natural rate of growth}\right]$$

Now 1.1 is an ordinary linear differential equation the solution of which is given by

$$Y_t = e^{\frac{s}{\alpha}t} Y_o \qquad 1.4$$

It follows from 1.4 that the higher (s) (the propensity to save), the faster must incomes be increasing in order that *ex ante* investment should continue to equal *ex ante* savings.

It is quite clear from the above, that whenever $G\omega\left[-\left(\frac{dt}{dY}\right)_\omega\right]$ exceeds $Gn\left[-\left(\frac{dY}{dt}\right)_n\right]$ that there will be a continuous tendency for depression to develop. For $G\omega$ cannot by definition be above Gn for any length of time, and immediately $G\omega$ falls to Gn or below it, *ex ante* savings will exceed *ex ante* investment and incomes will fall.

Whenever $G\omega < Gn$, $Ga\left[Ga = \left(\frac{dY}{dt}\right)_a\right]$, may be above $G\omega$ without reaching Gn. If this is so there will be a continuous tendency for booms to develop.

Mr. Harrod thus has a theory of (a) the conditions of long run dynamic equilibrium, (b) the conditions which will produce depressions and (c) conditions which will produce booms. In spite of the shortcomings of his model, to be noted below, Harrod's work is a significant contribution to this field of economic theory. For he makes clear the following propositions which were either not fully recognised before or not known.

(1) He defines a moving instead of a stationary equilibrium and this brings realism not only to the theory of the trade cycle but also to the theory of economic development.

(2) He shows that if a significant part of investment is accelerator investment of type (a), equilibrium requires an income which is increasing at a constant rate and hence that

(3) for equilibrium to be maintained the absolute amount of investment must be increasing through time.

(4) His theory has important policy implications. In particular, as was pointed out by Mrs. Robinson (7), it shows the inadequacy of Keynesian remedies for countries with a low propensity to save. For in such countries $G\omega$ will be low, hence if at that rate there is unemployment, Keynesian remedies will only produce inflation. The importance of this to the economics of « backward » countries can hardly be exaggerated.

Mr. Harrod's theory may be criticised on the following grounds:

(1) As was pointed out by Hicks (8), his system is mathematically unstable. Consider 1.4. If s increases then $G\omega$ must increase. But if previously $Ga = G\omega$, Ga will now diminish in fact become negative. But when incomes fall Ga will diverge even more from $G\omega$ and incomes will fall even further and so Harrod offers us no assistance in determining the path of Ga or the forces which will tend to prevent the cumulative divergence of Ga from $G\omega$.

(2) Because of (1) Harrod has only a theory of booms and depressions but no theory of the trade cycle. *I.e.* he has no theory of either the turning points or of the periodicity of fluctuations.

(3) In order to deal with innovations and other non-induced investment, Mr. Harrod adds a constant term $\lambda$ to each of the left hand parts of 1.1, 1.2 and 1.3. He assumes all innovations to be factor neutral *i.e* to leave the ratio of the marginal products of labour and capital unchanged. This will in general not be true. Moreover in order that $\alpha$ remain constant through time, we must assume that innovations are always made at just that time when owing to a fall in the marginal product of capital, $\alpha$ would have increased, and that the extent of the innovation is just such as to offset the increase in $\alpha$. This adds another stringent condition to equilibrium and there is no reason why it should ever be fulfilled.

(4) Lastly, let us assume that Gn is the full employment rate of growth of income. It then follows that $G\omega$ must always exceed Gn until full employment is reached. For if incomes are expanding at the rate $G\omega$, then sooner or later, *in the absence of innovations*, full employment incomes must be reached. But this cannot be so if $G\omega < Gn$. Since then whenever there is unemployment $G\omega > Gn$, there must as we have seen be a chronic tendency for slumps to develop. Harrod is thus very strong on the inevitability of slumps but has far less to say on the inevitability of booms.

Hicks starts where Harrod leaves off and we shall now examine how he deals with some of the shortcomings of Harrod's theory.

(7) J. Robinson's: Review article of Harrod's, *Towards a Dynamic Economics*, in the « Economic Journal », 1949.

(8) J. R. Hicks: *Mr. Harrod's Dynamic Theory*, « Economica », May 1949.

## II

Hicks is a great believer in the economic importance of lags. Making use of these he is able to get rid of the spurious instability of Harrod's model. Thus in Hicks, a large part of investment is still accelerator induced investment of type (a), but it is made a function of past rather than current changes in incomes. Similarly consumption (mainly because of production lags) is made a function of past rather than of current income levels. Hicks' basic equations thus become linear difference equations.

Hicks however is greatly impressed by Harrod's use of a moving, as opposed to a stationary equilibrium income. Since however in a depression, the rate of negative investment, *i.e.* non-replacement, is limited by technical considerations, the accelerator drops out of the equation altogether. This in the absence of further assumptions would lead to a stationary zero or (if there is some constant exogenous investment), constant depression income (since the propensity to consume is $< 1$). To avoid this, Hicks makes use of what he calls « autonomous investment » *i.e.* investment which independently of the rate of change, or level of income, is assumed to be increasing at a constant rate g. The autonomous investment term is written as $H(1+g)^t$.

He then proceeds in an exactly analogous fashion to Harrod. First we define two « warranted » income levels and growths: (a) that level of income and that rate of growth of income which will make accelerator plus autonomous investment equal to savings and (b) that level of income and that rate of growth of income which will make autonomous investment equal to savings. We have

$$Y + = E(1+g)^t \qquad 2.1\,a$$

$$Y + = L(1+g)^t \qquad 2.1\,b$$

where 2.1 a and 2.1 b are the equilibrium solutions of appropriate difference equations.

Next we have two equations of actual income and actual income growth, once again, one appropriate to a situation where the accelerator is working, one appropriate to a situation where it is not. *I.e.*

$$Y_t = \sum_{s=1}^{s=P} c_s Y_{t-s} + \sum_{s=1}^{s=P-1} v_s (Y_{t-s} - Y_{t-s-1}) + H(1+g)^t \qquad 2.2\,a$$

$$Y_t = \sum_{s=1}^{s=P} c_s Y_{t-s} + H(1+g)^t \qquad 2.2\,b$$

where $(c_1 \dots c_p)$ are lagged consumption coefficients and $(v_1 \dots v_p)$ are the lagged accelerators. Lastly we have an equation giving us the « natural » or full employment level and rate of growth of income *i.e.*

$$Y_t = F(1+g)^t \qquad 2.3$$

The main outline of the trade cycle is now clear. If we start with depression equilibrium income, a small shock making actual, diverge from warranted, income, and if we assume there to be no excess capacity and 2.2 a to be explosive, incomes will, as in Mr. Harrod's case move away indefinitely from the warranted income. The boom has started. But incomes cannot expand beyond the natural (full employment) income. Once full employment has been reached incomes can only expand at the natural rate g. But when they are expanding at that rate then incomes will tend to move to the warranted income as given by 2.1 a. If the latter is below the natural income, incomes must fall. But once this happens the accelerator drops out and 2.1 b gives the new equilibrium level of income. Incomes will thus fall until this new equilibrium has been reached. We are now in a depression equilibrium. But owing to the autonomous investment term, incomes will still be expanding. This means that excess capacity gets used up and must eventually disappear. Once that has happened the accelerator once again enters the equation and incomes will once again expand and the whole process will be repeated.

Hicks thus presents a complete theory of the cycle, including turning points. He shows that the length of the cycle will not vary greatly with the size of the coefficients (the accelerator and the propensity to consume). He is fully aware that full employment income (the ceiling) cannot be precisely defined and that income expansions may come to an end before full employment is reached, owing to bottlenecks and credit shortage. He takes account of replacement investment and shows that on the whole the « echo » effect (*i.e.* discontinuous replacement) is unimportant owing to the difference in the lifetime of equipment in different industries. He fully and elegantly deals with the problem of distributed investment lags (hump investment) and shows how they may lead to oscillations about the main trend, and he makes some tentative suggestions as to the policy recommendations to be drawn from his analysis.

Yet in spite of its elegance, its clearness of exposition and its completeness there are a considerable number of points which raise doubts in the mind of the reader and quite a few questions which are left unanswered. It is to these that we shall now turn.

## III

*The definition of the period and the stock cycle.*

Mr. Hicks takes the standard period as « the normal time taken for output to adjust itself to changes in demand » (p. 53). By this definition he believes



that he is able to avoid the difficulties which would arise from a separate demand and output equation. Mr. Hicks' equation is thus an output equation only. But his definition implies that $S_t = D_{t-1}$ (where S = = supply, D is demand). From this it follows that if $D_t$ is increasing through time, the difference $D_t - S_t$ *i.e.* $(D_t - D_{t-1})$ will be increasing through time. But this difference is the decumulation of stocks, hence the stocks decumulated will be increasing through time. Mr. Hicks obscures this by concentrating only on the supply equation. What in fact happens is this: when demand increases in period o it is exactly offset by a decumulation of stocks. In period 1 output increases by the amount of the decumulation. But in period 1 demand again exceeds supply but by more than it did in period o. Therefore the absolute loss in stocks in period 1 is greater than in period o. Thus according to Hicks producers will be losing stocks at an exponential rate all through the expansion.

But this is surely not so. Decumulation of stocks is an alternative to the raising of prices. Producers will clearly come to a stage if the loss in stocks is increasing with each period, when they will prefer to raise prices. This in practice will be an important brake in the expansion. For when producers are unwilling to lose further stocks they will in fact choke off demand and slow down its rate of increase by higher prices. This in itself may after a time bring about the down turn.

Moreover Hicks' definition of the period and exclusive attention to supply leads to graver difficulties in the concept of an equilibrium rate of growth. For here too he assumes that supply lags behind demand. Producers never anticipate a rise in demand. From this it follows that they will be continuously losing ever larger stocks. This is clearly incompatible with any sort of equilibrium. To obtain this producers must invest *in advance* of demand increases, not as Hicks assumes, after they have taken place.

*The accelerator.*

This line of criticism leads us directly to the use Hicks makes of the accelerator. The latter in Hicks' model is purely physically determined. That is to say producers never expect output (demand) to be increasing but always invest just sufficient to produce an output equal to what was demanded in the previous period. This, in a boom, is surely unrealistic. There can be little doubt that producers frequently invest in advance of an increase in demand in times of expansion, for, once their stocks are low, they can increase their profits by so doing. But even if we abstract from the expectation problem (and as we have seen that leads us into difficulties when defining the equilibrium rate of growth and level of income) another problem still remains.

It is well known that when producers have to undertake new investment they will not simply reproduce old equipment but take advantage of the opportunity to buy technically superior equipment. That is to say, even assuming all production functions to be linear and homogeneous, the form of these functions will be changing. If that is so the accelerator cannot be regarded as constant. Hicks attempts to avoid this difficulty by dividing investment into autonomous and induced and assuming the former to contain all innovation investment. This distinction however is purely artificial. It is difficult to believe that there is any form of investment, other than (perhaps) government investment, which is independent of both the level and rate of change of income. Innovations are undertaken at times most favourable to producers and thus clearly depend on either the current or the expected state of demand. If we then say that autonomous investment is a function of the trend rate of growth of income, we shall be arguing in a circle for the trend rate is the equilibrium rate, and the equilibrium rate is a function of the rate of growth of autonomous investment. The best we can say is that some form of investment is more lagged than some other. We conclude therefore that the distinction between autonomous and induced investment even if it could be made, could not ensure a constant accelerator.

But even if this difficulty could be overcome another one remains. Let us suppose that we are in a depression. As was shown above Hicks assumes the latter to come to an end when excess capacity is exhausted. But can we assume that excess capacity will be exhausted in all industries at the same time? Hicks' own assumption as to the varying life time of equipment precludes this. It therefore follows that some industries will be undertaking induced investment while others have still excess capacity. It is then possible that we shall get a number of small short lived booms, before the real booms gets under way. Suppose that there are only three industries A, B and C. Let us assume A to be the first to exhaust its excess capacity. Since B and C still have surplus equipment, $V_a$ the accelerator when A is investing will be relatively small, the equation may be damped and after a short boom incomes fall to depression level again. A now has excess capacity again, but B finds that it has reached capacity output. The accelerator $V_b$ when any B is investing may again be small, but this time when incomes rise, A will once again reach full capacity and the accelerator will become $(V_a + V_b)$. If the latter is high enough a full boom will develop, if not, incomes will fall again and A and B will both have excess capacity, but C may now invest. Once again the process is repeated and it is only if some time during the upswing caused by C's investment, A and B exhaust their excess capacity, that the full boom will develop. Not only therefore will there be a number of short small booms before the proper expansion gets under way but the latter may never occur: it is conceivable that we never get beyond small short lived booms.

# STATISTICAL APPENDIX (*)

## ITALIAN BUDGET SUMMARY - ASSESSMENTS AND OBLIGATIONS
(milliards of lire)

**Table A**

| Financial year beginning 1st July | Assessed revenue | | | | | Engaged expenditure | | | | | Surplus or deficit | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current revenue | | | Movement of capital | Total | Current expenditure | | | Movement of capital | Total | Current revenue and expenditure | Movement of capital | Total |
| | Recurrent | Non recurrent | Total | | | Recurrent | Non recurrent | Total | | | | | |
| 1938-39 | 27 | 0.9 | 28 | — 3 | 31 | 23 | 17 | 40 | 2.8 | 43 | — 12 | + 0.2 | — 11.8 |
| 1945-46 | 125 | 3 | 128 | 92 | 220 | 160 | 349 | 509 | 44 | 553 | — 381 | + 48 | — 333 |
| 1946-47 | 346 | 6 | 352 | 335 | 687 | 318 | 614 | 932 | 303 | 1,235 | — 580 | + 31 | — 549 |
| 1947-48 | 674 | 154 | 828 | 200 | 1,028 | 615 | 932 | 1,547 | 262 | 1,813 | — 719 | — 66 | — 785 |
| 1948-49 | 919 | 96 | 1,015 | 45 | 1,060 | 796 | 723 | 1,519 | 98 | 1,617 | — 504 | — 53 | — 557 |
| 1949-50 | 1,081 | 368 | 1,449 | 344 | 1,793 | 892 | 829 | 1,721 | 213 | 1,984 | — 322 | + 131 | — 191 |
| July-Nov. 1950 | 494 | 91 | 585 | 22 | 607 | 438 | 213 | 651 | 34 | 685 | — 66 | — 12 | — 78 |

*Source*: *Conto riassuntivo del Tesoro.*

## CURRENT REVENUE, BY MAJOR SOURCES (a)

**Table B**

| Source | 1938 - 39 | | 1947 - 48 | | 1948 - 49 | | 1949 - 50 | | 1950 - 51 (b) | | Index numbers 1938-39=1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | millions of lire | % of total | millions of lire | % of total | millions of lire | % of total | millions of lire | % of total | millions of lire | % of total | |
| I - *Revenue from Taxation* | | | | | | | | | | | |
| Direct taxes | | | | | | | | | | | |
| — recurrent | 5,624.8 | 24.0 | 97,346.2 | 11.7 | 127,276.8 | 12.3 | 156,060.8 | 10.8 | 181,125.9 | 14.5 | 27.1 |
| — non recurrent (c) | 879.9 | 3.2 | 153,669.0 | 18.6 | 82,839.1 | 8.3 | 170,555.2 | 11.8 | 55,396.6 | 4.4 | 63.3 |
| Indirect taxes on transactions (d) | 6,042.5 | 21.8 | 260,954.9 | 31.6 | 357,276.1 | 35.2 | 387,615.7 | 26.7 | 379,398.0 | 30.5 | 62.8 |
| Customs duties and Consumption taxes | 6,380.3 | 23.2 | 136,966.6 | 16.6 | 201,298.5 | 19.8 | 250,431.6 | 17.3 | 231,730.0 | 18.6 | 36.3 |
| Consumption taxes on State monopolized products | 3,580.0 | 13.0 | 115,588.9 | 13.9 | 178,281.2 | 17.6 | 211,828.1 | 14.6 | 206,560.0 | 16.6 | 57.7 |
| Lotteries | 543.6 | 2.3 | 7,611.1 | 0.9 | 12,651.5 | 1.2 | 18,061.6 | 1.2 | 12,894.2 | 1.0 | 23.7 |
| Sundry revenue | 2,885.2 | 10.5 | 41,747.3 | 5.0 | 35,392.6 | 3.5 | 45,869.6 | 3.2 | 46,446.0 | 3.7 | 16.1 |
| II - *Revenue from Lire-Found* | — | — | — | — | 13,754.4 | 1.3 | 196,699.9 | 13.6 | 118,632.8 | 9.6 | — |
| III - *Other Revenue* (e) | 644.3 | 2.0 | 15,917.8 | 1.7 | 6,554.0 | 0.6 | 11,387.3 | 0.8 | 13,450.6 | 1.1 | 20.9 |
| *Total* | 27,575.6 | 100 | 827,801.9 | 100 | 1,015,324.4 | 100 | 1,448,509.8 | 100 | 1,245,633.5 | 100 | 45.2 |
| *Index numbers*, 1938-39=1 | 1 | | 30.0 | | 36.8 | | 52.5 | | 45.2 | | |

(a) Revenue assessed in the period, on the basis of the assessments at the end of each financial year; (b) Estimates at November 30, 1950; (c) Non-recurrent direct taxes jumped in 1947-48 to 18.6% of total revenue, as a result of the extraordinary taxes on capital put into force by decree of March, 29, 1947; (d) Turnover tax (which accounts for about 60% of the group), taxation of successions, stamp duty, etc.; (e) Net income from the national estate and from autonomous public corporations (railways, postal service, etc.).

*Source*: *Conto Riassuntivo del Tesoro.*

## ITALIAN INTERNAL NATIONAL DEBT
(milliards of lire - Index Numbers, 1938=100)

**Table C**

| End of period | Consolidated and others | | Redeemable debt | | Floating debt | | | | | Treasury notes | Total of internal national debt | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Treasury bills | Interest bearing current accounts | Advances by the Bank of Italy | Total | | | | |
| | Amount | I. N. | Amount | I. N. | | | | Amount | I. N. | | Amount | I. N. |
| 1938 - June | 53 | 100 | 49 | 100 | 9 | 20 | 1 | 30 | 100 | 1.5 | 133.5 | 100 |
| 1947 - " | 53 | 100 | 429 | 875 | 279 | 175 | 366 | 820 | 2,733 | 6.6 | 1,308.6 | 980 |
| 1948 - " | 53 | 100 | 429 | 875 | 279 | 175 | 366 | 820 | 2,733 | 6.6 | 1,308.6 | 980 |
| 1949 - " | 53 | 100 | 392 | 800 | 744 | 479 | 470 | 1,693 | 5,643 | 8.4 | 2,146.4 | 1,608 |
| 1950 - March | 53 | 100 | 374 | 763 | 721 | 663 | 544 | 1,919 | 6,397 | 8.9 | 2,354.9 | 1,764 |
| June | 53 | 100 | 587 | 1198 | 722 | 636 | 535 | 1,894 | 6,311 | 9.0 | 2,543.0 | 1,905 |
| September | 53 | 100 | 584 | 1191 | 750 | 655 | 471 | 1,876 | 6,253 | 9.0 | 2,522.0 | 1,889 |
| October | 53 | 100 | 584 | 1191 | 754 | 660 | 471 | 1,885 | 6,283 | 9.0 | 2,531.0 | 1,895 |
| November | 53 | 100 | 584 | 1191 | 786 | 680 | 471 | 1,937 | 6,454 | 9.0 | 2,583.9 | 1,908 |

*Source*: *Conto riassuntivo del Tesoro.*

(*) See explanatory notes in No. 3, October 1947 (p. 197) and No. 8, January-March 1949 (p. 70).



## DEPOSITS AND CURRENT ACCOUNTS OF ITALIAN BANKS (a)
(millions of lire)

**Table D**

| End of the period | Time and Demand Deposits | | | Current Accounts (b) | | | % of 4 to 1 | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Amounts outstanding | Quarterly changes | Index number | Amounts outstanding | Quarterly changes | Index number | | Amounts outstanding | Quarterly changes | Index number |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1947 - December | 528,516 | — | 100 | 485,373 | — | 100 | 91.8 | 1,013,889 | — | 100 |
| 1948 - June | 651,375 | + 49,575 | 123.0 | 609,763 | + 82,055 | 125.7 | 93.6 | 1,261,138 | + 131,630 | 124.3 |
| December | 805,497 | + 65,005 | 152.4 | 714,781 | + 50,161 | 147.4 | 88.7 | 1,520,278 | + 115,166 | 149.7 |
| 1949 - March | 845,176 | + 39,679 | 160.0 | 774,422 | + 59,641 | 159.5 | 91.6 | 1,619,598 | + 99,320 | 159.1 |
| June | 860,859 | + 15,683 | 162.8 | 811,444 | + 37,022 | 167.2 | 94.2 | 1,672,303 | + 52,705 | 164.9 |
| September | 949,220 | + 88,361 | 179.6 | 856,561 | + 45,117 | 176.5 | 90.2 | 1,805,781 | + 133,878 | 178.1 |
| December | 1,015,937 | + 66,717 | 192.2 | 932,787 | + 76,226 | 192.1 | 91.8 | 1,948,724 | + 142,943 | 192.2 |
| 1950 - March | 1,051,762 | + 35,825 | 209.1 | 947,449 | + 14,662 | 195.2 | 90.1 | 1,999,211 | + 50,487 | 197.2 |
| June | 1,059,031 | + 7,269 | 209.2 | 945,700 | — 1,749 | 194.8 | 89.3 | 2,004,731 | + 5,520 | 197.7 |
| September | 1,112,499 | + 53,468 | 210.5 | 1,003,932 | + 58,232 | 206.8 | 90.2 | 2,116,431 | + 111,700 | 208.7 |
| December | 1,170,526 | + 58,027 | 221.5 | 1,060,980 | + 57,048 | 218.6 | 90.6 | 2,231,506 | + 115,075 | 220.1 |

(a) The data refer to 365 banks (commercial and savings banks) which hold about 99 % of the total deposits collected by all Italian banks. (b) Interbank current accounts are excluded.

*Source*: *Bollettino* of the Bank of Italy.

## DEPOSITS, CURRENT ACCOUNTS AND ASSETS OF ITALIAN BANKS (a)
(millions of lire)

**Table E**

| Items | New Series (b) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 31.12.48 | 30.6.49 | 30.9.49 | 31.12.49 | 31.3.50 | 30.6.50 | 30.9.50 |
| | Amounts outstanding | | | | | | |
| Deposits and current accounts | 1,520,278 | 1,672,303 | 1,805,781 | 1,948,720 | 1,999,211 | 2,004,731 | 2,116,431 |
| Cash and sums available at sight | 169,048 | 151,813 | 162,388 | 228,140 | 186,540 | 182,352 | 184,047 |
| Fixed deposits with the Treasury and other Institutions | 177,748 | 231,277 | 269,664 | 265,898 | 309,131 | 263,729 | 276,961 |
| Government Securities (c) | 414,200 | 446,226 | 427,140 | 427,761 | 450,906 | 518,405 | 541,881 |
| Credits to clients (d) | 1,129,196 | 1,218,778 | 1,340,130 | 1,473,679 | 1,469,763 | 1,512,983 | 1,614,478 |
| | Index Numbers: 31-12-1948=100 | | | | | | |
| Deposits and current accounts | 100 | 110.- | 118.8 | 128.2 | 131.5 | 131.9 | 139.2 |
| Cash and sums available at sight | 100 | 89.8 | 95.8 | 134.9 | 110.3 | 107.9 | 108.8 |
| Fixed deposits with the Treasury and other Institutions | 100 | 130.1 | 151.6 | 149.4 | 173.9 | 148.4 | 155.6 |
| Government Securities (c) | 100 | 107.7 | 103.1 | 103.2 | 108.9 | 125.2 | 130.9 |
| Credits to clients (d) | 100 | 107.9 | 118.6 | 130.5 | 130.1 | 134.0 | 142.9 |
| | % of deposits and c/a | | | | | | |
| Deposits and current accounts | | | | | | | |
| Cash and sums available at sight | 11.1 | 9.1 | 9.0 | 11.7 | 9.3 | 9.1 | 8.7 |
| Fixed deposits with the Treasury and other Institutions | 11.7 | 13.8 | 14.9 | 13.6 | 15.5 | 13.2 | 13.1 |
| Government Securities (c) | 27.2 | 26.7 | 23.6 | 21.9 | 22.6 | 25.9 | 25.6 |
| Credits to clients (d) | 74.2 | 72.8 | 74.2 | 75.6 | 73.5 | 75.5 | 76.3 |

(a) The data refer to 365 banks (commercial and savings banks) which hold about 99% of the total deposits collected by all Italian banks.

(b) The Bank of Italy has revised the quarterly series on banking assets, beginning from December 1948. For back figures (old series), see, *Recent Banking Developments in Italy*, this Review, No. 11, October-December 1949, pp. 230-231.

(c) Treasury bills and other Government securities. Nominal value.

(d) Includes: bills on hand (portafoglio), contangoes (riporti), advances (anticipazioni), current accounts (conti correnti), loans recoverable on salaries (prestiti su pegno e contro cessione stipendio), loans (mutui), current accounts with sections for special credits (conti correnti con le sezioni speciali), credits abroad (impieghi all'estero), non-Government securities (titoli non di Stato). The figures for 1949 have been rectified in the last *Bollettino* of the Bank of Italy.

*Source*: *Bollettino* of the Bank of Italy.

## NOTE CIRCULATION, PRICES, WAGES AND SHARE QUOTATIONS IN ITALY

Table F

(Index, 1938 = 100)

| Year or month | Note Circulation (a) | | Wholesale prices (c) | | Cost of Living (c) | Wage rates in industry (c) | Share quotations (b) | Fine gold | |
|---|---|---|---|---|---|---|---|---|---|
| | Amount (b) (milliards of lire) | Index | All commodities | Foodstuffs | | | | Price of one gram (lire) (d) | Index |
| 1945 December | 389.8 | 1,732 | .. | .. | 2,764 | .. | 517 | 823 | 3,165 |
| 1947 December | 795.0 | 3,537 | 5,526 | 6,296 | 4,929 | 5,105 | 1,206 | 827 | 3,180 |
| 1948 December | 970.9 | 4,316 | 5,696 | 5,969 | 4,917 | 5,415 | 1,416.9 | 995 | 3,827 |
| 1949 June | 905.4 | 4,024 | 5,219 | 5,416 | 4,990 | 5,426 | 1,526.3 | 1,035 | 3,981 |
| December | 1,058.2 | 4,700 | 4,747 | 4,954 | 4,753 | 5,791 | 1,511.3 | 957 | 3,680 |
| 1950 March | 982.9 | 4,368 | 4,732 | 5,081 | 4,682 | 5,800 | 1,480.5 | 872 | 3,354 |
| June | 994.2 | 4,419 | 4,671 | 5,069 | 4,823 | 5,811 | 1,428.8 | 775 | 2,981 |
| July | 1,038 9 | 4,617 | 4,694 | 5,123 | 4,824 | 5,818 | 1,374.2 | 834 | 3,207 |
| August | 1,035.4 | 4,602 | 4,913 | 5,395 | 4,909 | 5,820 | 1,496.4 | 863 | 3,319 |
| September | 1,059.8 | 4,710 | 5,088 | 5,429 | 5,007 | 5,825 | 1,511.6 | 856 | 3,292 |
| October | 1,056 9 | 4,697 | 5,176 | 5,413 | 4,946 | 5,825 | 1,660.5 | 861 | 3,311 |
| November | 1,058.2 | 4,703 | 5,279 | 5,451 | 4,997 | 5,828 | 1,667.1 | 866 | 3,331 |
| December | 1,176.4 | 5,228 | 5,423 | 5,366 | 5,009 | 5,966 | .. | 919 | 3,535 |

(a) End of year or month. Includes: Bank of Italy notes, Treasury notes, and A-M-lire; (b) *Bollettino* of the Bank of Italy; (c) *Bollettino Mensile di Statistica* issued by the Central Institute of Statistics; (d) Business Statistics Centre of Florence.

## PRICES AND YIELDS OF ITALIAN SECURITIES BY MAIN CATEGORIES

Table G

(annual or monthly averages)

| Year or month | Government Securities | | | | | | | | Share Securities | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Bonds | | | | Treasury Bills | | Average | | | |
| | Consolidated | | Redeemable | | | | | | | |
| | Price (index number '38 = 100) | Yield (per cent per annum) | Price (index number '38 = 100) | Yield (per cent per annum) | Price (index number '38 = 100) | Yield (per cent per annum) | Price (index number '38 = 100) | Yield (per cent per annum) | Price (index number '38 = 100) | Yield (per cent per annum) |
| 1938 | 100.0 | 5.40 | 100.0 | 5.37 | 100.0 | 5.07 | 100 | 5.33 | 100 | 5.17 |
| 1946 | 105.3 | 5.13 | 112.1 | 4.78 | 91.3 | 5.55 | 98.2 | 5.43 | 781.7 | 0.45 |
| 1947 | 94.4 | 5.72 | 98.1 | 5.59 | 73.7 | 6.88 | 86.5 | 6.16 | 2,235.8 | 0.64 |
| 1948 | 99 4 | 5.43 | 85.8 | 6.60 | 89.2 | 5.93 | 87.6 | 6.22 | 1,319.5 | 2.31 |
| 1949 | 105.9 | 5.10 | 96.1 | 5.89 | 94.6 | 5.59 | 96.0 | 5.68 | 1,517.7 | 3.97 |
| 1950 March | 104 9 | 5.15 | 93.1 | 6 08 | 90.4 | 5.85 | 92.5 | 5.89 | 1,480.5 | 5.31 |
| June | 104 9 | 5.15 | 95.0 | 5.96 | 92.0 | 5.75 | 94.5 | 5.77 | 1,428.8 | 5.88 |
| July | 105.1 | 5.14 | 91.7 | 6 17 | 90.4 | 5.85 | 92.4 | 5.90 | 1,374 2 | 6.17 |
| August | 105 7 | 5.11 | 90.7 | 6.24 | 89.7 | 5.90 | 91.6 | 5.93 | 1,496.4 | 5.67 |
| September | 104.7 | 5.16 | 92.5 | 6.12 | 91.8 | 5.76 | 93.3 | 5.84 | 1,511.6 | 5.61 |
| October | 105.9 | 5.10 | 94.0 | 6.02 | 89.4 | 5.92 | 92.5 | 5.89 | 1,660.5 | 5.19 |
| November | 106.5 | 5.07 | 94.2 | 6.01 | 87.9 | 6.02 | 91.9 | 5.93 | 1,667.1 | 5 11 |

*Source*: *Bollettino* of the Bank of Italy.

## WHOLESALE PRICES BY GROUPS OF COMMODITIES

Table H

(Index, 1938 = 100)

| Period | All Commodities | Foodstuffs | | Textiles | Hides, Skins and Footwear | Raw materials, metal and engineering products | Fuels and lubricants | Chemical raw materials and products | Paper goods | Lumber | Bricks, Lime and Cement | Glass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Vegetable | Animal | | | | | | | | | |
| 1947 June | 5,329 | 4,185 | 9,085 | 6,988 | 6,796 | 5,066 | 3 592 | 5.563 | 9.105 | 7.741 | 6.060 | 4,608 |
| December | 5.526 | 4.393 | 8,035 | 6,404 | 4.953 | 6,296 | 4.063 | 5 815 | 7 894 | 6.546 | 6.309 | 4.608 |
| 1948 June | 5,142 | 4,177 | 7,085 | 6,172 | 4.557 | 5,851 | 4.342 | 5.810 | 5.560 | 5.893 | 6.174 | 4.889 |
| December | 5,696 | 5,278 | 7,678 | 5,996 | 5,316 | 5 712 | 4.432 | 5.814 | 5.164 | 5.571 | 5.988 | 4.889 |
| 1949 June | 5,215 | 4,967 | 6,469 | 6,004 | 4,412 | 5 373 | 3 919 | 5.659 | 4.630 | 5.660 | 6.082 | 4.889 |
| December | 4.747 | 4.493 | 6 054 | 5,644 | 4,112 | 5,165 | 3.878 | 5,314 | 4.502 | 5,664 | 6,239 | 4.957 |
| 1950 March | 4.732 | 4.547 | 6,379 | 5.562 | 3.788 | 4.870 | 3,742 | 5,375 | 4.374 | 5,721 | 6,167 | 4.928 |
| June | 4,671 | 4,754 | 5,780 | 5.539 | 3,580 | 4.695 | 3,631 | 5,183 | 4,320 | 5,648 | 6,048 | 4.928 |
| July | 4.694 | 4,783 | 5,896 | 5.551 | 3,573 | 4,685 | 3,662 | 5,234 | 4.394 | 5,648 | 6,045 | 4.928 |
| August | 4,913 | 4,970 | 6,381 | 5,895 | 3,909 | 4,848 | 3,710 | 5,249 | 4,508 | 5,648 | 6,103 | 4.928 |
| September | 5,088 | 4,915 | 6,658 | 6,397 | 4,673 | 5,531 | 3,793 | 5,238 | 4.937 | 5,648 | 6.052 | 4.928 |
| October | 5,176 | 4,819 | 6,868 | 6,646 | 4,939 | 6,030 | 3,859 | 5,292 | 5,111 | 5,648 | 6,070 | 4.928 |
| November | 5,279 | 4,818 | 7,019 | 7,035 | 5,178 | 6,199 | 4 004 | 5,425 | 5,789 | 5,675 | 6,069 | 4.928 |
| December | 5,423 | 4,891 | 7,254 | 7,329 | 5,521 | 6,285 | 4,106 | 5,489 | 6,469 | 5,807 | 6,068 | 4.928 |

*Source*: *Bollettino Mensile di Statistica*.



## WAGES AND SALARIES IN ITALY

(gross retributions - inclusive of family allowances)

Table I

(Index, 1938 = 100)

| Categories | 1948 | 1949 | 1950 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Dec. | Dec. (d) | March | June | July | August | Sept. | Octob. | Novem. |
| *Industry*: | | | | | | | | | |
| Specialised workers | 4.497 | 4.590 | 4.918 | 4.927 | 4.934 | 4.938 | 4.943 | 4.945 | 4.949 |
| Skilled workers | 5,187 | 5,252 | 5.582 | 5.591 | 5.593 | 5.596 | 5.601 | 5.603 | 5.605 |
| Ordinary workers and semi-skilled labourers | 5.618 | 5.662 | 5.991 | 5.998 | 6.002 | 6.006 | 6.011 | 6.011 | 6.012 |
| Labourers | 6,134 | 6,163 | 6.495 | 6.509 | 6.517 | 6.523 | 6.530 | 6.530 | 6.533 |
| *General index of Industry* | *5.415* | *5.471* | *5.800* | *5.811* | *5.818* | *5.820* | *5.825* | *5.825* | *5.828* |
| *Land Transport* | *5.299* | *5.679* | *5.675* | *5.683* | *5.722* | *5.734* | *5.769* | *5.769* | *5.777* |
| *Government Civil Employees*: | | | | | | | | | |
| Group A (a) | 2,851 | 2,851 | 2,851 | 3.327 | 3.373 | 3.373 | 3.373 | 3.373 | 3.373 |
| Group B (b) | | | | 3.370 | 3.424 | 3.424 | 3.424 | 3.424 | 3.424 |
| Group C (c) | 3.947 | 3.947 | 3.947 | 4.223 | 4.223 | 4.223 | 4.223 | 4 223 | 4.223 |
| Subordinate staff | 4.679 | 4,679 | 4,679 | 4.928 | 4.928 | 4.928 | 4.928 | 4.928 | 4.928 |
| *General Index of Government Civil Employees* | *3.533* | *3.533* | *3.533* | *3.912* | *3.936* | *3.936* | *3.936* | *3.936* | *3.936* |

(a) Administrative grade; (b) Executive grade; (c) Clerical grade; (d) The net remunerations have been reduced since April 1, 1949 as a consequence of the special deduction made for financing the « Fanfani Plan » for housing reconstruction (Act No. 43 of 28-2-1949).

*Source*: *Bollettino Mensile di Statistica*.

## NATIONAL INDEX OF LIVING COST

Table L

(1938 = 100)

| Year or month | All Items | Foodstuffs | Clothing | Heating and lighting | Housing | Miscellaneous |
|---|---|---|---|---|---|---|
| 1947 - December | 4.929 | 6,196 | 6,866 | 2,393 | 269 | 4.359 |
| 1948 - June | 4,835 | 6,111 | 5.993 | 2,354 | 363 | 4.317 |
| December | 4.917 | 6,149 | 5,810 | 3,069 | 399 | 4.387 |
| 1949 - June | 4,990 | 6,192 | 6,019 | 3,185 | 532 | 4.489 |
| December | 4,753 | 5,719 | 5,845 | 3,464 | 574 | 4.502 |
| 1950 - March | 4,682 | 5,658 | 5,630 | 3,429 | 593 | 4.586 |
| June | 4,823 | 5,888 | 5,544 | 3,418 | 595 | 4.585 |
| July | 4,824 | 5,844 | 5,514 | 3,421 | 814 | 4.588 |
| August | 4,909 | 5,962 | 5,562 | 3,433 | 861 | 4,614 |
| September | 5,007 | 6,090 | 5,693 | 3,495 | 869 | 4,641 |
| October | 4,926 | 5,959 | 5,921 | 3,564 | 877 | 4,684 |
| November | 4,997 | 6,016 | 6,102 | 3,590 | 893 | 4.711 |
| December | 5,009 | 6,014 | 6,252 | 3,602 | 897 | 4.739 |

*Source*: *Bollettino Mensile di Statistica*.

## UNEMPLOYMENT IN ITALY BY CLASSES (a)

Table M

| End of period | Employed persons and pensioners seeking other jobs | Housewives seeking first job | Young people under 21 or ex-servicemen seeking first job | Unemployed formerly employed | Total | | |
|---|---|---|---|---|---|---|---|
| | | | | | absolute figures | Index numbers | of which women |
| 1948 - October | 77,781 | 193,810 | 306,171 | 1,175,425 | 1,752,187 | 100 | 609,205 |
| December | 87,386 | 211,671 | 363,785 | 1,498,429 | 2,161,271 | 123.3 | 679,502 |
| June | 83,637 | 180,406 | 353,287 | 1,198,438 | 1,815,768 | 103.6 | 600,483 |
| December | 88,833 | 173,910 | 405,268 | 1,387,595 | 2,055,606 | 117.3 | 630,200 |
| 1950 - March | 94,472 | 172,154 | 435,383 | 1,263,370 | 1,966,234 | 112.2 | 608,741 |
| April | 95,647 | 170,367 | 434,810 | 1,255,437 | 1,956,261 | 111.6 | 615,851 |
| May | 90,987 | 164,831 | 419,014 | 1,162,594 | 1,837,426 | 104.9 | 607,151 |
| June | 83,003 | 145,021 | 398,044 | 1,040,781 | 1,672,849 | 95.5 | 560,984 |
| July | 83,721 | 143,188 | 406,515 | 1,074,835 | 1,708,259 | 97.5 | 570,332 |
| August | 84,324 | 140,311 | 407,398 | 1 060,379 | 1,692,972 | 96.6 | 560,889 |
| September | 83,152 | 139.997 | 407,259 | 1,034,412 | 1,664,820 | 95.0 | 550,680 |
| October | 83,900 | 144,673 | 421,193 | 1,090,714 | 1,740,480 | 99.3 | 575,790 |
| November | 87,268 | 150,467 | 443,157 | 1,169,978 | 1,850,870 | 105.6 | ... |
| December | 93,322 | 153,844 | 457,970 | 1,346,673 | 2.069,809 | 118.1 | ... |

(a) See Explanatory Notes in No. 8 of this Review (pag. 71, « Unemployment »).

*Source*: Ministry of Labour.

## ITALIAN INDUSTRIAL PRODUCTION INDEX (a)

(unadjusted - monthly averages, 1938 = 100)

**Table N**

| Year or Month | General Index | Mining | Manufactures | | | | | | | | | | Electric Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Food | Textiles | Lumber | Paper | Metallurgy | Engineering | Non-metallic ores | Chemicals | Rubber | |
| 1948 - *Average* | 99 | 82 | 93 | 93 | 96 | 54 | 73 | 87 | 104 | 90 | 93 | 103 | 148 |
| 1949 - *Average* | 105 | 90 | 101 | 111 | 96 | 58 | 91 | 85 | 115 | 96 | 105 | 115 | 136 |
| 1950 - January | 110 | 101 | 105 | 128 | 96 | 57 | 101 | 87 | 118 | 97 | 104 | 135 | 148 |
| February | 107 | 93 | 104 | 130 | 99 | 49 | 98 | 84 | 117 | 97 | 96 | 136 | 133 |
| March | 121 | 105 | 118 | 135 | 113 | 64 | 109 | 98 | 132 | 105 | 115 | 143 | 145 |
| April | 114 | 94 | 110 | 123 | 96 | 62 | 98 | 99 | 124 | 123 | 114 | 123 | 146 |
| May | 125 | 104 | 120 | 133 | 107 | 64 | 105 | 114 | 131 | 129 | 126 | 140 | 174 |
| June | 118 | 93 | 112 | 118 | 95 | 62 | 103 | 111 | 127 | 130 | 119 | 124 | 178 |
| July | 120 | 102 | 114 | 126 | 94 | 65 | 109 | 111 | 131 | 122 | 119 | 133 | 183 |
| August | 101 | 88 | 94 | 121 | 71 | 49 | 92 | 99 | 86 | 112 | 118 | 84 | 168 |
| September | 125 | 102 | 120 | 135 | 112 | 61 | 111 | 116 | 133 | 116 | 121 | 146 | 171 |
| October | 131 | 109 | 127 | 139 | 121 | 63 | 117 | 114 | 137 | 127 | 137 | 141 | 170 |
| November | 126 | 112 | 117 | 135 | 114 | 61 | 115 | 107 | 128 | 127 | 137 | 149 | 159 |

(a) We give in this Table the revised series of index numbers on industrial production published by the Central Institute of Statistics beginning from October 1950 issue of his « Statistical Bulletin ». As can be seen, in the new series the food and engineering industries are included, which were not represented in the precedent one. Moreover, the classification of the several items among the different classes and sub-classes of industry has been modified. The principles on which the returns and the calculations are made have, however, not be changed. (See, this Review, No. 8, January-March 1949, pagg. 70-71).

*Source*: *Bollettino Mensile di Statistica*.

## EXCHANGE RATES IN ITALY (a)

(Italian lire per unity of foreign currency - monthly averages)

**Table O**

| Country | 1949 December | 1950 | | | | |
|---|---|---|---|---|---|---|
| | | March | June | September | October | November |
| United States | 624.31 | 624.82 | 624.79 | 624.81 | 624.81 | 624.82 |
| United Kingdom | 1,748.07 | 1,749.50 | 1,749.41 | 1,749.47 | 1,749.47 | 1,749.50 |
| Belgium (b) | 12.71 | 12.71 | 12.71 | 12.71 | 12.71 | 12.71 |
| Denmark | 90.39 | 90.46 | 90.46 | 90.46 | 90.46 | 90.46 |
| France (b) | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 |
| West Germany | — | — | — | — | — | 148.77 |
| Norway (b) | 87.38 | 87.38 | 87.38 | 87.38 | 87.38 | 87.38 |
| Netherlands (b) | 164.29 | 164.43 | 164.41 | 164.41 | 164.41 | 164.41 |
| Sweden (b) | 120.62 | 120.62 | 120.62 | 120.62 | 120.62 | 120.62 |
| Switzerland | 145.25 | 145.19 | 144.23 | 143.27 | 142.88 | 142.90 |
| Spain | 28.27 | 26.12 | 24.72 | 24.99 | 26.43 | 26.43 |
| Portugal | 21.71 | 21.73 | 21.73 | 21.73 | 21.73 | 21.73 |
| Turkey | 223.19 | 223.37 | 223.14 | 223.25 | 223.15 | 223.15 |
| Egypt | 1,792.74 | 1,794.21 | 1,794.12 | 1,794.18 | 1,794.18 | 1,794.21 |
| India | 131.21 | 131.21 | 131.21 | 131.21 | 131.21 | 131.21 |
| Argentina | 69.37 | 69.42 | 69.42 | 69.42 | 69.42 | . . |
| Brazil | 33.75 | 33.77 | 33.77 | 33.77 | 33.77 | 33.77 |
| Canada | 566.27 | 567.91 | 567.93 | 567.95 | 567.95 | 567.96 |
| New Zeeland | 1,748.07 | 1,749.50 | 1,749.41 | 1,749.47 | 1,749.47 | 1,749.50 |
| Australia | 1,398.45 | 1,399.60 | 1,399.53 | 1,399.57 | 1,399.57 | 1,399.60 |
| South Africa | 1,748.07 | 1,749.41 | 1,749.41 | 1,749.47 | 1,749.47 | 1,749.50 |

(a) For a general picture of exchange rate system in Italy, see *International Financial Statistics*, by « International Monetary Fund ». See also this Review, No. 10, July-September 1949, pag. 187, Table V.

(b) Clearing exchange rate.

*Source*: *Bollettino Mensile di Statistica*.