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PPAA/93/20

INTERNATIONAL MONETARY FUND

Monetary and Exchange Affairs Department

International Capital Transactions: Should They Be Restricted?

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December 1993

Abstract

Some prominent economists and officials contend that government restrictions should be used to limit international capital movements that are considered destabilizing. This paper briefly summarizes the recent usage of such restrictions, discusses their international acceptance and their theoretical justification, reviews recent empirical studies of their efficacy, and examines their efficacy in Ireland, Spain, and Portugal during the latter part of 1992. The conclusion is that such restrictions typically have no more than fleeting and minor success in attaining their objectives.

JEL Classification Number: F32

1/ The author thanks A. Kourelis for her able research assistance. The views expressed in this paper are those of the author and do not necessarily represent those of the Fund.

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I. Introduction

The question posed in the title may seem rather anachronistic, in view of the shift in many countries toward freer markets in recent years. That shift is far from being complete or free from backsliding, however. Moreover, a number of prominent economists contend that government restrictions should be maintained, or at least kept in reserve, for certain categories of transactions, not least international capital movements. In particular, it is sometimes argued that the Exchange Rate Mechanism of the European Monetary System should be buttressed with capital controls. ^{1/} Following a capsule summary of the recent use of international capital controls, this paper discusses their international acceptance, their theoretical justification, and their efficacy in attaining overall balance-of-payments or exchange rate goals.

II. Recent Usage of Restrictions

Notwithstanding the much publicized transition toward freer markets, restrictions over international capital flows have been widespread in recent years. Typically, such restrictions take the form of multiple exchange rate arrangements, quantitative limits on international capital movements, or taxes. ^{2/} These or similar controls were employed at the end of 1992 by no fewer than 140 of the 178 territories and member countries examined by the International Monetary Fund.

^{1/} See, for example, Eichengreen and Wyplosz (1993), p. 89.

^{2/} The paper therefore adopts a relatively wide definition of capital restrictions.

Nor is the use of such restrictions confined to developing or formerly communist countries. Of the 24 countries classified as "industrial" by the IMF in 1992, nine restricted capital movements, or capital account convertibility. 1/ Indeed, only a few months before this writing, during the 1992 turbulence within the European Monetary System, several members of the EMS employed capital account restrictions in an attempt to avert devaluations of their currencies. 2/

III. International Acceptance

Under prevailing codes of international financial behavior, greater tolerance is extended to capital account than to current account restrictions. The best known of these codes, the Articles of Agreement of the International Monetary Fund, declares that,

"Members may exercise such controls as are necessary to regulate international capital movements, but no member may exercise these controls in a manner which will restrict payments for current transactions or which will unduly delay transfers of funds in settlement of commitments, except as provided in Article VII, Section 3(b) and in Article XIV, Section 2" (Article VI, Section 3; emphasis supplied).

1/ Mathieson and Rojas-Suárez (1993) p. 4.

2/ Goldstein, et al. (1993), p. 57.

Tolerance does not imply enthusiasm, however. As early as 1961, the OECD promulgated its Code of Liberalization of Capital Movements, which directs that subscribing countries should "progressively abolish between one another ... restrictions on movements of capital to the extent necessary for effective economic cooperation." 1/ And in 1988 the EC Council of Ministers adopted a directive stipulating for most EC countries the complete liberalization of capital movements by July 1, 1990--although restrictions are authorized for periods as long as six months to combat capital surges that seriously disturb a member's foreign exchange market and monetary policy. 2/ Moreover, even though international codes generally may express greater tolerance for capital than for current account restrictions, the latter, if defined to include all government barriers to trade, may in fact constitute the greater obstacle to international economic integration; for, as Guitián has observed, national capital markets now seem to be more closely connected than the goods markets. 3/

IV. Theoretical Justification

To justify the use of capital controls, a number of arguments have been advanced, not always supported by cogent theories. Currently, the most fashionable apologia maintain that such controls can attain the following goals: (1) insuring that domestic saving is used to fund domestic investment rather than investment abroad (one motivation being that the government can more easily tax the income from investment if such income is

1/ Argy (1987), p. 109.

2/ Ungerer, et al. (1990), p. 34.

3/ Guitián (1993), p. 3.

earned domestically); (2) limiting foreign ownership and control of domestic production facilities; and (3) preventing capital flows from destabilizing the domestic economy or disrupting structural reform efforts. 1/

Conspicuous by its absence from this list is the goal of influencing the terms of trade. From the standpoint of national rather than world welfare, controls over capital movements can be justified by the same optimum tariff argument used to justify controls over commodity movements. No doubt this argument is omitted from the popular justifications because publicizing such a stratagem would be impolitic for any country, but especially for one that possessed the market power to reap appreciable gains from it.

This paper focuses on the argument that controls should be used to prevent capital flows from destabilizing the domestic economy. The argument has merit only if such flows can be identified. To begin with, then, a definition of "destabilizing" is needed. Any definition is likely to be highly controversial, in view of the debates that have swirled about the issue of speculation. We shall walk directly into the lion's den and posit that, at least for purposes of this paper, a destabilizing capital movement is one motivated by an erroneous forecast of an exchange rate--one that tends to drive the exchange rate away from the equilibrium that would be supported by rational speculators whose foresight was correct (and whose own transactions had no influence on the long-run exchange rate).

Even if this definition is accepted as conceptually defensible, it is not readily operational, not easily usable for singling out destabilizing

1/ Mathieson and Rojas-Suárez (1993), pp. 4-7.

capital flows in actual experience. Indeed, the difficulty of crafting an operational definition comprises a major, if not devastating, objection to the use of capital controls. In particular, how is the "controller" to discern when the expectations of speculators, or the prevailing exchange rates, are wide of the mark, since the future is inherently uncertain? No one has yet constructed a generally accepted econometric model on which a controller could rely to explain even the past behavior of exchange rates, let alone to forecast future equilibrium rates and the influence, for good or ill, of speculative flows.

Moreover, if destabilizing flows could truly be identified, the monetary authorities could engage in offsetting capital movements, or counterspeculation, and generally reap a profit while negating the influence of the destabilizing flows, without having to alter the course of macroeconomic policy. It is not clear why controls should be preferred to such (sterilized) foreign exchange market intervention in these circumstances.

However, some advocates of controls surely have in mind a broader definition of "destabilizing" than the one advanced here. Indeed, for many officials, any capital movement that tended to shift the exchange rate away from the officially preferred level would be considered destabilizing, or at least undesirable, even if the preferred exchange rate were inconsistent with the course of macroeconomic policy and differed from the equilibrium rate. Essentially, what is sought is the power to employ monetary policy to attain a domestic macroeconomic goal while also being able to influence the exchange rate toward a level not necessarily supported by that policy--

that is, to dedicate monetary policy to achieving a domestic macroeconomic goal without forgoing the targeting of the exchange rate. Since it is well known that policymakers must have as many independent policy instruments at their disposal as they have independent policy targets (if they are to attain their targets under varying conditions), controls to regulate international transactions, and thus the exchange rate, may seem to offer the means of freeing monetary policy for domestic purposes.

The issue then becomes primarily an empirical one. Can controls in fact accomplish the task? And if they can, at what cost? These two seemingly separate questions are so closely interconnected from the policy standpoint that any rational official would consider them jointly. The following sections review some instructive recent experience with capital controls.

V. Recent Empirical Studies

A number of studies have examined the efficacy of capital controls in recent years. Rather than undertake an exhaustive review of these efforts, this paper seeks to distill their primary conclusions, especially those most relevant to the issue of macroeconomic stabilization.

Because nearly all of these studies yield highly similar results, it may be said of capital controls--unlike many other important issues in economics--that a standard view of their effects is readily discernible: the controls that have been imposed over international capital flows in recent years have generally failed to gain significantly greater independence for domestic monetary policy except, in some cases, for brief

periods. In other words, the verdict from recent experience is that controls can buy some time, but not much.

This conclusion clearly emerges from the most comprehensive up-to-date (at this writing) survey of the use of capital controls. In Liberalization of the Capital Account: Experience and Issues, Mathieson and Rojas-Suárez (1993) issue the following appraisal: 1/

...whereas capital controls in the industrial countries effectively limited their residents' net foreign asset or liability positions during much of the 1950s and 1960s, the collapse of the Bretton Woods System in the early 1970s created the expectation of large exchange rate adjustments and was accompanied by large-scale (often illegal) capital flows that overwhelmed even the most comprehensive capital control systems.... when macroeconomic and financial conditions created substantial incentives for moving funds abroad, capital controls in many developing countries were often of limited effectiveness in stemming capital flight during the 1970s and 1980s.... recent studies suggest that the effectiveness of capital controls eroded more rapidly during the 1980s than during the 1960s and 1970s.

A slightly later survey delivers a similar judgment. Investigating the efficacy of barriers erected to curb inward capital surges, this paper finds

1/ Mathieson and Rojas-Suárez, pp. 1-2.

that even where concerted restrictions were deployed, the effects seem to have been fleeting. 1/

Apart from these surveys, detailed examinations of some individual cases shed further light on the issues addressed in this paper. Exchange controls imposed by Ireland in December, 1978, had only small and transitory success in insulating the key domestic interest rates from rates abroad, according to Browne and McNelis. 2/ In Japan, capital controls used during 1978-80 were found by Otani (1983) to have only a very minor impact on the exchange rate. 3/ A singular contrast to this standard view is offered by Galy (1993), who argues that "capital controls were instrumental in reconciling the domestic and external objectives of monetary policy in Spain over the 1980s." 4/

The reason that capital controls so commonly fail is that capital can flow through channels that are extremely difficult to monitor, and the profits from exploiting these loopholes can be sizable. Aside from concealed transactions that, if detected, would readily be identified as pure capital movements, evasive capital movements can occur as counterparts to current account transactions through such artifices as paying for imports before or after the customary or scheduled dates (leading or lagging), or misstating on invoices the payments that are actually made (under- or overinvoicing). To prevent such circumvention would require a vast, intrusive, and costly enforcement mechanism akin. Thus, it is not

1/ International Monetary Fund, Policy Development and Review Department (1993), p. 33.

2/ Browne and McNelis (1990), p. 57.

3/ Otani (1983), p. 330.

4/ Galy (1993), p. 23.

surprising that analysts have generally deemed capital controls to be largely ineffectual.

To this general or standard view some fairly sophisticated partial dissents have been registered, however. In particular, it is argued that even though the effectiveness of controls commonly erodes with the passage of time, such an interval is all that should be needed to reverse a speculative assault on a currency. Presumably, by relieving downward pressure on the domestic currency in the foreign exchange markets for even a brief period, capital controls can induce speculators to reconsider underlying economic conditions (including monetary policy) and to regain their confidence in the domestic currency. To assist in the evaluation of this argument, the next section investigates some recent experience with capital controls employed by participants in the Exchange Rate Mechanism (ERM).

VI. Recent Episodes in Ireland, Portugal, and Spain

In efforts to avert devaluations of their currencies within the ERM, Ireland, Portugal, and Spain imposed or intensified restrictions on capital flows during the latter part of 1992. While they differed in content, all of the restrictions sought to restrain net outflows. 1/

1/ Rather than an outright prohibition of certain transactions (as in Ireland and Portugal), the Spanish measures in effect placed a tax on them. The intent of the Spanish measures was to raise the cost and lower the attractiveness of engaging in particular transactions. More details are presented in the following paragraphs, while further description of these measures can be found in Goldstein, et al. (1993), p. 57, and IMF, World Economic Outlook: Interim Assessment (1993), pp. 3-4.

On September 23 the Bank of Spain introduced three new controls on the foreign exchange transactions of domestic banks. To inhibit their speculation against the peseta, the regulations required them to deposit at the Bank of Spain for one year without interest an amount equal to the peseta value of any new long positions in foreign currencies (with maturities at or before the spot value date). To discourage speculation by foreign banks, the regulations required that the domestic banks deposit an amount equal to the value of new peseta-denominated loans to nonresidents other than those related to commercial activities. Third, the domestic banks were directed to hold a cash reserve equal to the full amount of new peseta liabilities in branches and subsidiaries of Spanish banks abroad or in domestic branches of foreign banks.

On October 5 these restrictions were rescinded and replaced by a new requirement for noninterest bearing deposits at the Bank of Spain for the peseta counterpart of (1) same-day or next-day peseta sales to nonresidents and also of (2) new forward short positions in foreign currency contracted with nonresidents. These new restrictions were abolished on November 22.

In Ireland on September 24 the Central Bank began much stricter enforcement of existing capital controls. Nontrade related credits to nonresident Irish pound-denominated accounts exceeding 250,000 Irish pounds had to be reported to the Central Bank of Ireland. Loans and swaps to nonresidents for periods of less than one year were permitted only with Central Bank permission, and forward foreign exchange transactions of less than 21 days and all nontrade-related forward transactions were prohibited altogether. All capital controls were abolished on January 1, 1993.

As in Ireland, the Central Bank of Portugal introduced no new controls, but intensified those already at its disposal. On September 24 it began strict enforcement of limits on open foreign exchange positions. In addition, it enforced prohibitions against short-term escudo lending to nonresidents and nonresident purchases of domestic money market instruments. On December 16 these controls were eliminated.

In none of these countries were the controls adequate to prevent devaluations within the ERM. The Spanish peseta and the Portuguese escudo were devalued by 6 percent on November 23, and the Irish punt by 10 percent on January 30, 1993.

But might the controls have at least bought a little time? Or were they simply otiose? At least a tentative answer can be obtained by examining the behavior of differentials between interest rates in the (relatively uncontrolled) Euromarkets and comparable rates in the domestic money markets of the three countries. A significant and sustained jump in such a differential upon the imposition of controls would be consistent with the conclusion that the controls were at least somewhat successful in impeding the targeted net capital movements.

In Charts 1 and 2 the excess of the three-month Eurocurrency deposit rate over the corresponding domestic interbank rate is plotted for the Spanish peseta and for the Irish punt (insofar as the availability of data would permit) on a daily basis for May, 1992, through April, 1993. As data on the Portuguese escudo were not available for three-month maturities, Chart 3 relates to overnight transactions

In all three countries controls were used--to some degree in lieu of further tightening of domestic monetary policy--as a means of defending the foreign exchange value of the domestic currency. Thus, if the controls were effective in insulating the domestic money market, while in force they should have permitted domestic interest rates to remain below the comparable (but free-market) Eurorates. By this criterion, the controls were unimpressive, as can be seen in the charts.

This conclusion must be qualified, however. In the case of Ireland, reliable data on which a detailed opinion might be based are not available. Once the pound sterling was withdrawn from the ERM on September 16, 1992, our data source (DRI) found it impossible to obtain representative quotes for domestic interbank rates in Ireland. This data drought continued throughout the Irish experiment with intensified exchange controls. While the absence of data makes it hard to form a judgment about the degree to which financial market stringency in Ireland might have differed from that in the Euromarket, it seems most unlikely that the unavailability of readily obtainable interest rate quotations would signify greater ease in the Irish market than in the Euromarket, where rates were readily quoted. 1/

But perhaps the negative conclusion on the efficacy of the controls must be qualified on another ground. As can be seen in Charts 4-7, the domestic interest rate often appreciably exceeded the comparable Eurodeposit rate for certain other European currencies--specifically, those of Finland, Norway, and Sweden--that came under intense downward pressure in the foreign

1/ This judgement is shared by analysts of both the Euromarket and the Irish market who were contacted by the author.

exchanges during this period. The governments of these countries strove to defend their currencies without the aid of exchange controls, although the Finnish markka was allowed to float relatively freely on September 8, the Swedish krona on November 19, and the Norwegian krone on December 10.

(Again, the U.K. pound, to which Chart 7 refers, was withdrawn from the ERM on September 16.) The fact that domestic interest rates frequently exceeded the Eurorates for these three Scandinavian currencies during this tumultuous period inspires the question whether controls might have, at least temporarily, permitted greater ease in the domestic markets relative to the Euromarkets. In other words, since the same phenomenon was not observed, at least to the same degree, for the peseta and the escudo, should the controls in Spain and Portugal be given good marks? Another, related, question also arises: if controls were not being employed in the Scandinavian countries, why were significant interest differentials observed between the domestic markets and the Euromarkets?

In response, it may be that Spain and Portugal did acquire some temporary insulation. Indeed, the interest differentials observed for the three Scandinavian currencies may be attributable largely to the marked increases in interest rates required to maintain the foreign exchange values of these currencies during this period, for those increases may have exacerbated concerns about the creditworthiness of the domestic banks (that is, about their ability to pay such increases) and thus may have generated a credit risk premium within the domestic interest rates that was absent from the Eurorates prevailing among foreign transactors deemed more creditworthy. Insofar as controls can substitute for higher interest rates, they reduce

the likelihood of such differentials. Whatever success the controls may have had in this respect seems to have eluded Ireland, however, and even in Spain and Portugal any such success seems to have been a minor victory in a struggle soon lost.

VII. Some Further Evidence for Portugal

Another perspective from which to evaluate capital controls is the response of the equity markets. Just before controls are introduced, markets typically expect a depreciation of the domestic currency in the foreign exchange markets, implying, other things equal, an improvement in the relative profitability of firms dealing in traded goods. Therefore, disregarding other influences, if market participants believe that the controls will avert the depreciation, the advent of the controls should raise the relative valuation of the equities of firms dealing chiefly in nontraded goods.

The evaluation of any such effect on the equities markets is a complex undertaking and is hampered by the lack of suitable data, but enough data may be available for Portugal to permit at least a rough, preliminary evaluation for that country. On Charts 8-10 are plotted the weekly percentage returns (including market price changes) for the stocks of Portuguese firms that could be identified as concentrating in the production of exports, of import-competing goods, and of nontraded goods, along with the total return to all stocks included in the market index compiled for Portugal by the International Finance Corporation. As can be seen, immediately after the enforcement of controls on September 24 the returns on

the equities of export-goods producers did decline relative to the overall market return, and relative to the return for nontraded-goods producers. But for the equities of import-competing firms, the weekly percentage returns rose, rather than declined, in relation to returns both for the overall market and for the nontraded-goods producers. Finally, returns on the equities of nontraded-goods producers did not rise appreciably relative to returns for the overall market. While hardly conclusive--partly because of the small sample stage--these statistics in and of themselves would lend little support to any claim that market participants had much confidence in the efficacy of the controls.

VIII. Summary and Conclusion

Despite the heralded progress toward freer markets, controls over international capital movements remain the rule rather than the exception. Capital controls, while not welcomed, are permitted under the IMF's Articles of Agreement, and the OECD and the EC, which have adopted measures liberalizing capital flows, allow member countries to impose restrictions. Among the various justifications offered for such controls, the claim that they can be used to prevent capital flows from destabilizing the domestic economy is perhaps of greatest interest to policymakers at this time, and is the subject of this paper.

The successful use of capital controls encounters major obstacles. "Destabilizing" capital flows must be defined and then identified, and efficacious enforcement mechanisms must be deployed. Empirical studies

typically find that governments have had no more than fleeting and minor success in overcoming these obstacles in recent years.

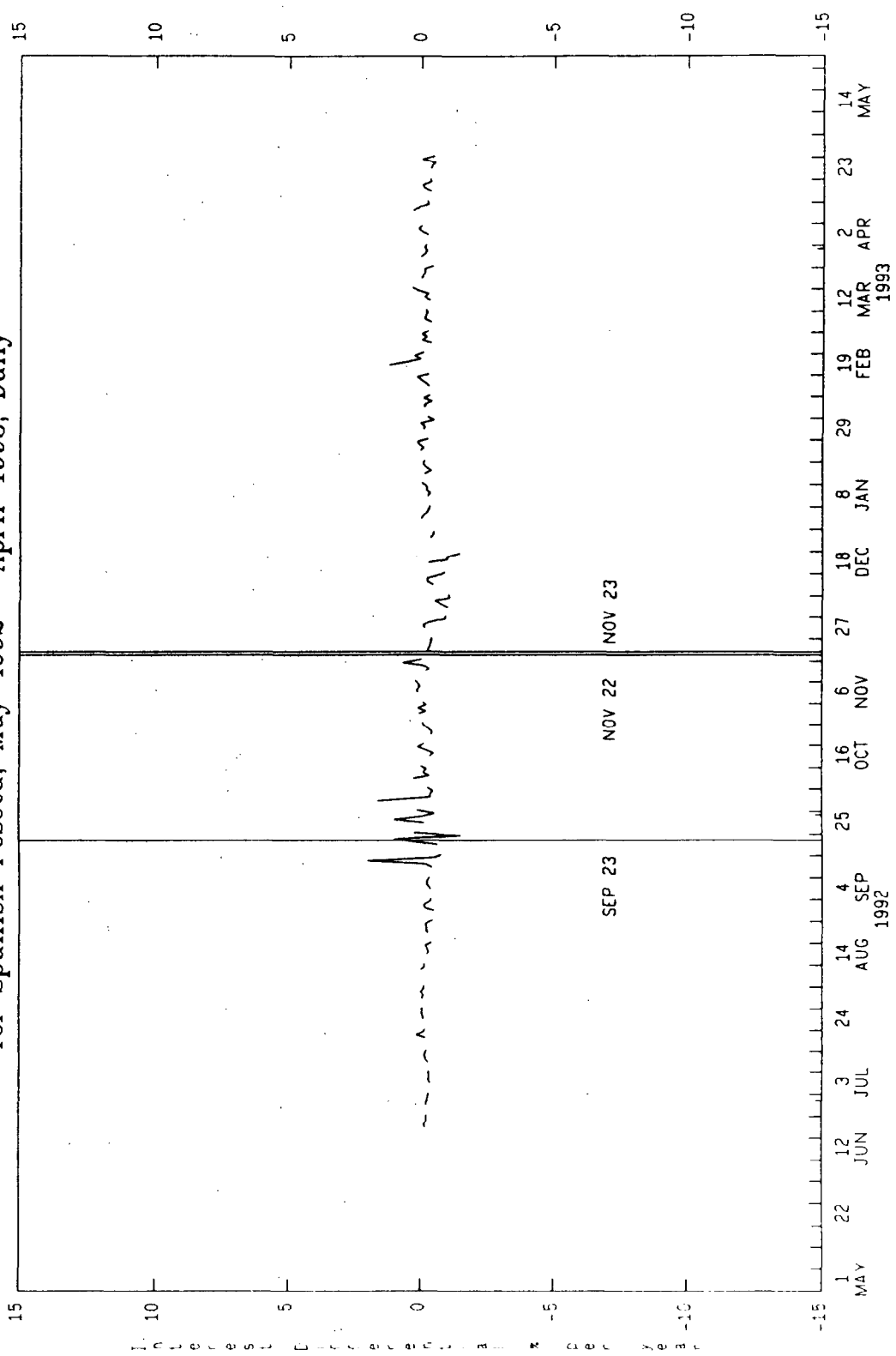
The conclusion of this paper is similar. Controls employed by Ireland, Portugal, and Spain during the autumn of 1992 did not allow those countries, except very briefly, to enjoy lower interest rates domestically than the rates prevailing for Eurodeposits in their currencies. Nor did the relative returns to the equities of traded- and nontraded goods producers in Portugal clearly respond to that country's controls in a manner implying confidence that the controls would avert a depreciation of the escudo. At most, it may be said that Spain 1/ and Portugal may have achieved some temporary insulation, but altogether, the effect was limited and short-lived.

It is unlikely that capital controls can rigorously monitor the many channels through which capital can flow without the aid of techniques approaching those of the police state. At least in principle, a more acceptable alternative might be to engage in sterilized intervention, which should succeed--and reap profits for the intervenors--if undertaken in sufficient volume to offset truly destabilizing capital movements. The prevalence of controls despite their inadequacy poses a long-standing challenge to the educational role of economists.

1/ In the case of Spain, the intention was precisely to attain short-run effects and the measures were lifted within two months; see Linde (1993).

Chart 1

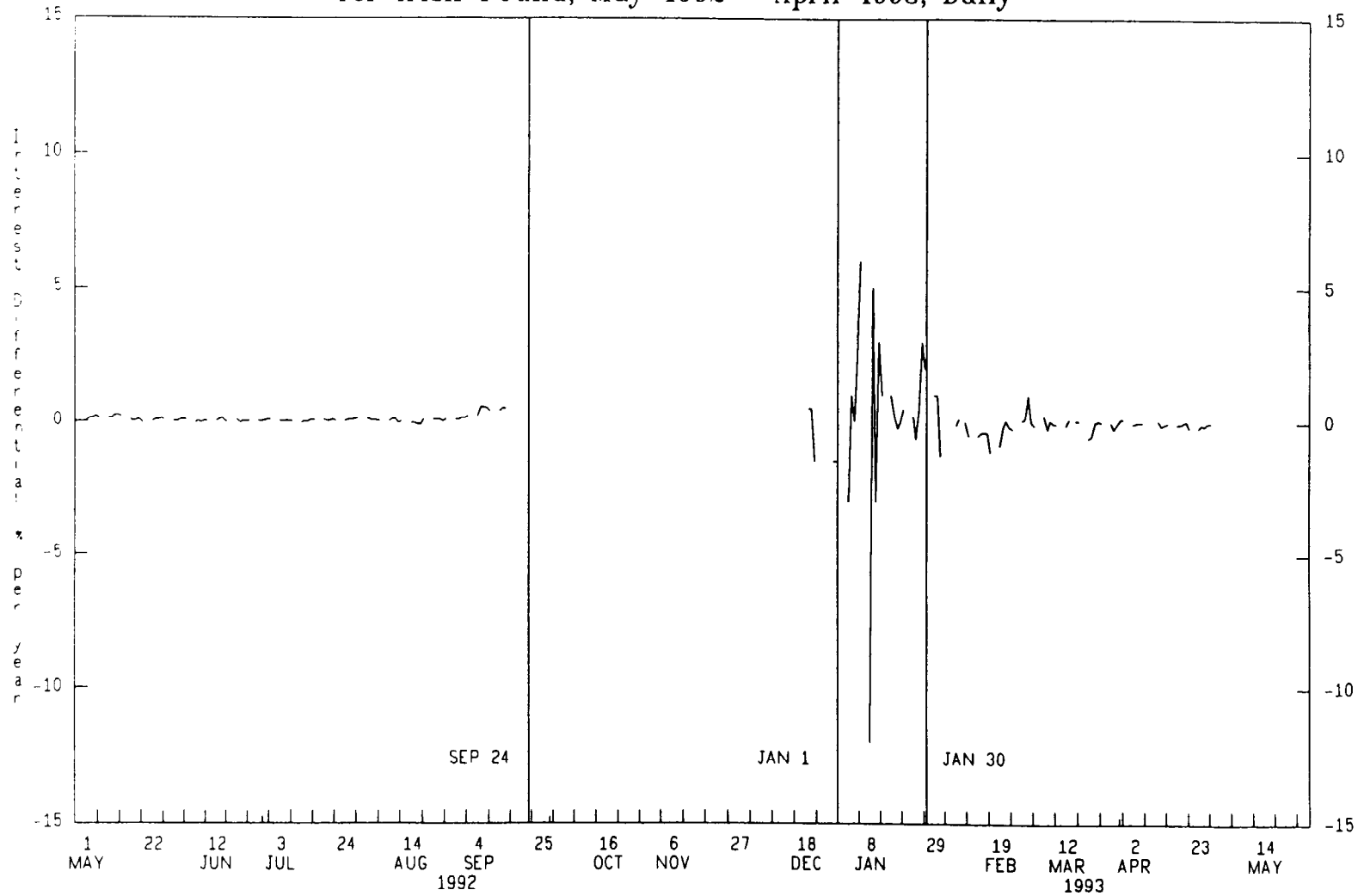
3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for Spanish Peseta, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

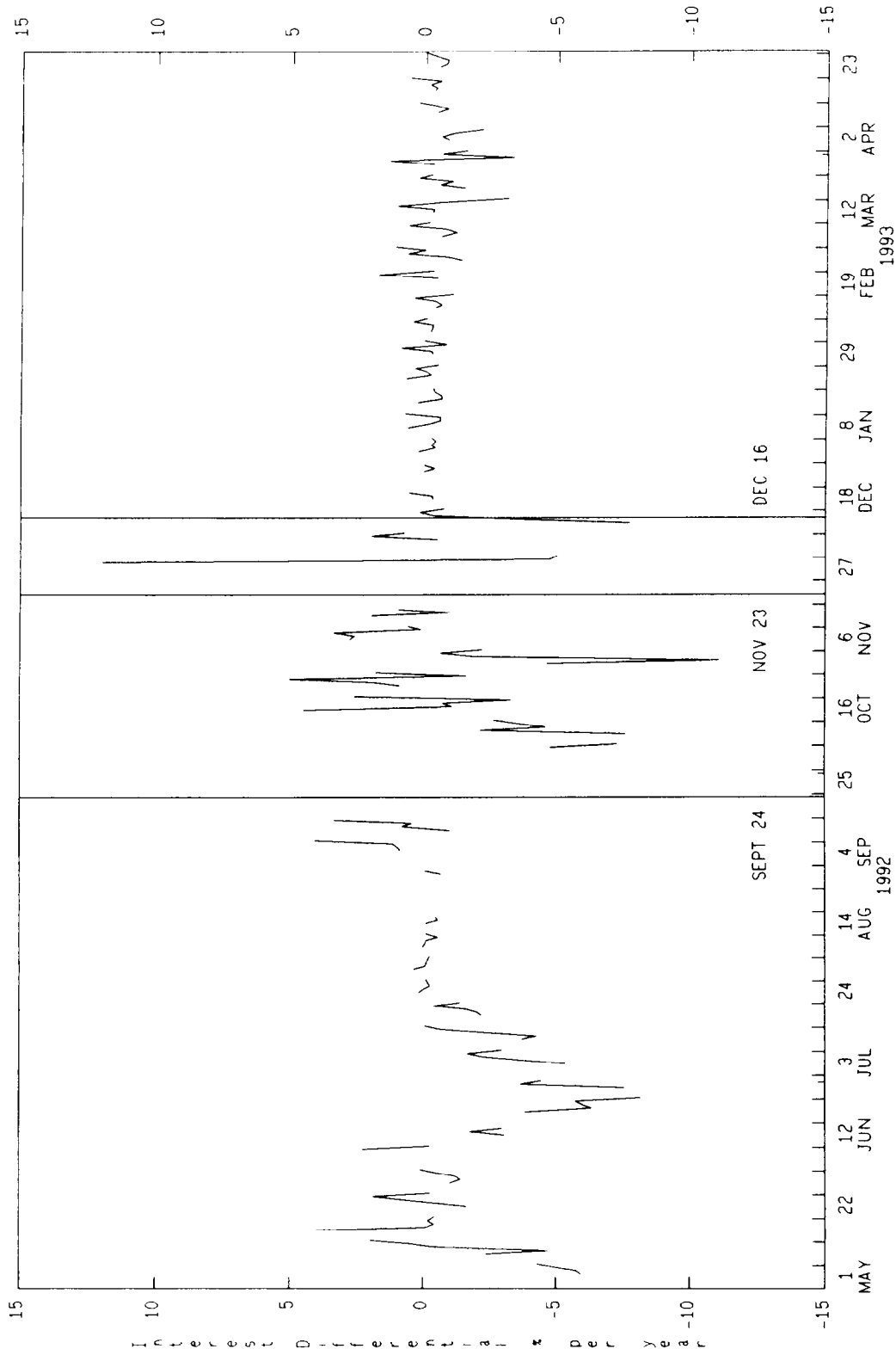
Chart 2

3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for Irish Pound, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

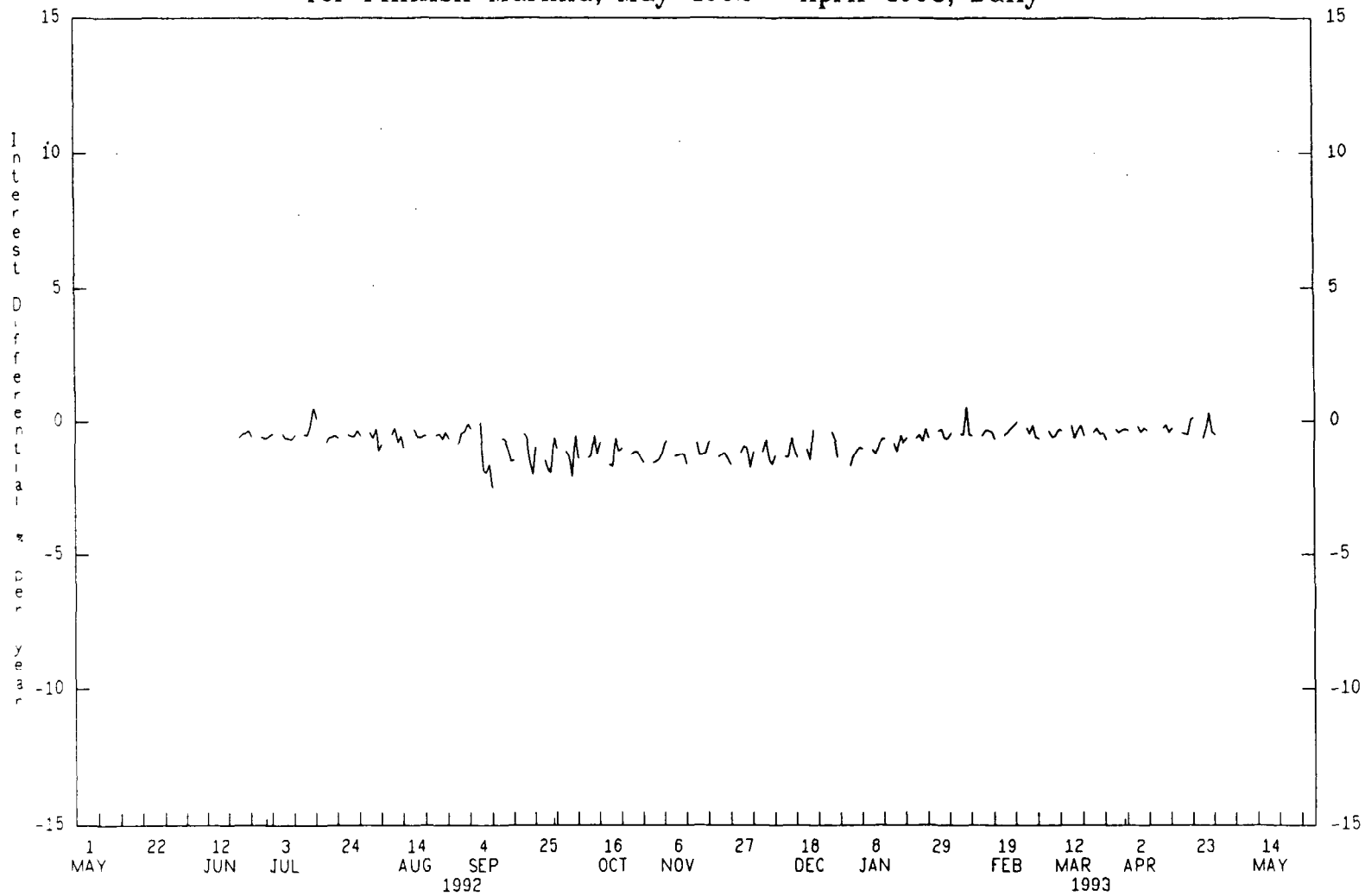
Chart 3
Overnight Eurodeposit Rate Minus Overnight Domestic Interbank Rate
for Portuguese Escudo, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

Chart 4

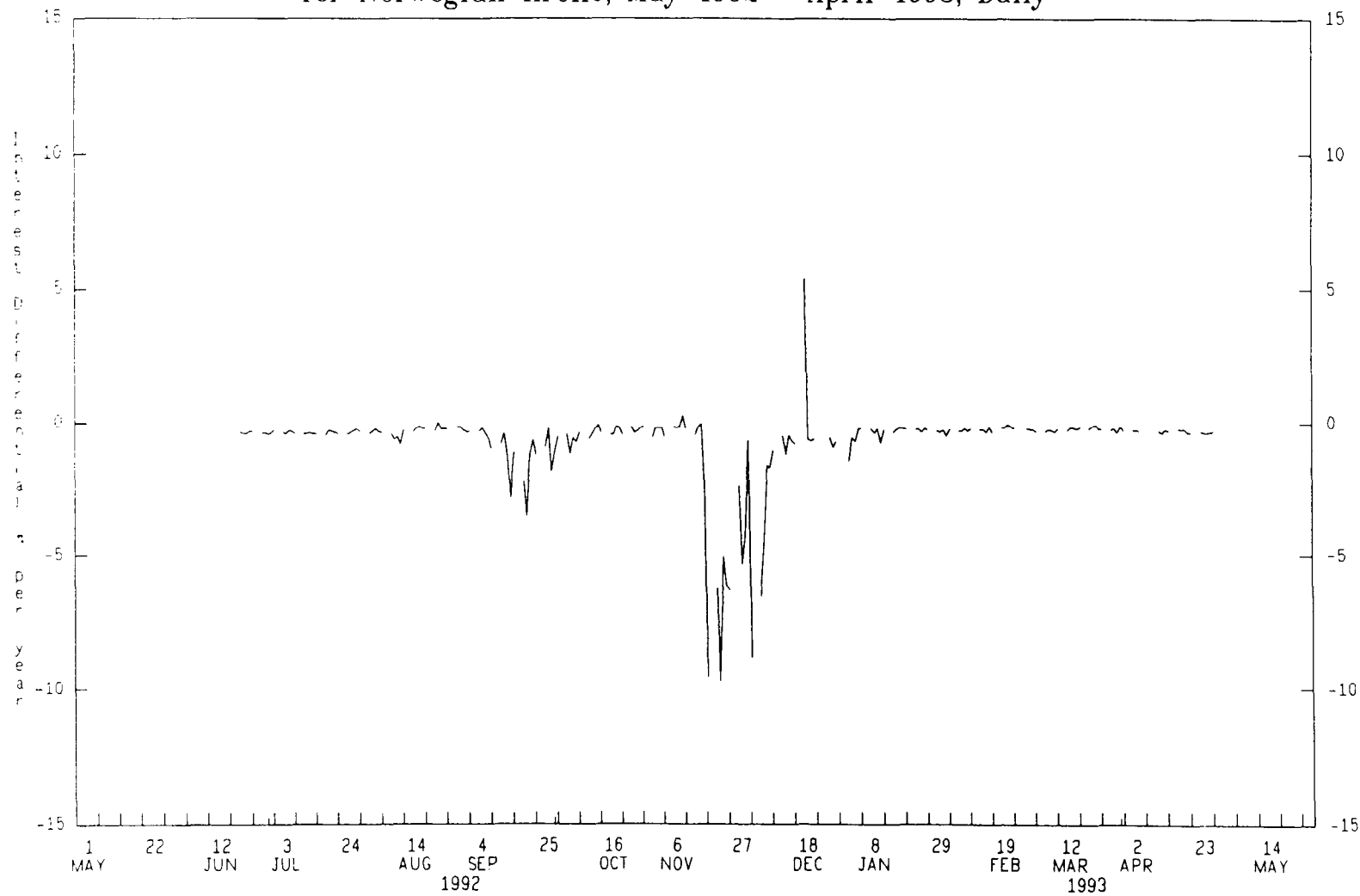
3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for Finnish Markka, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

Chart 5

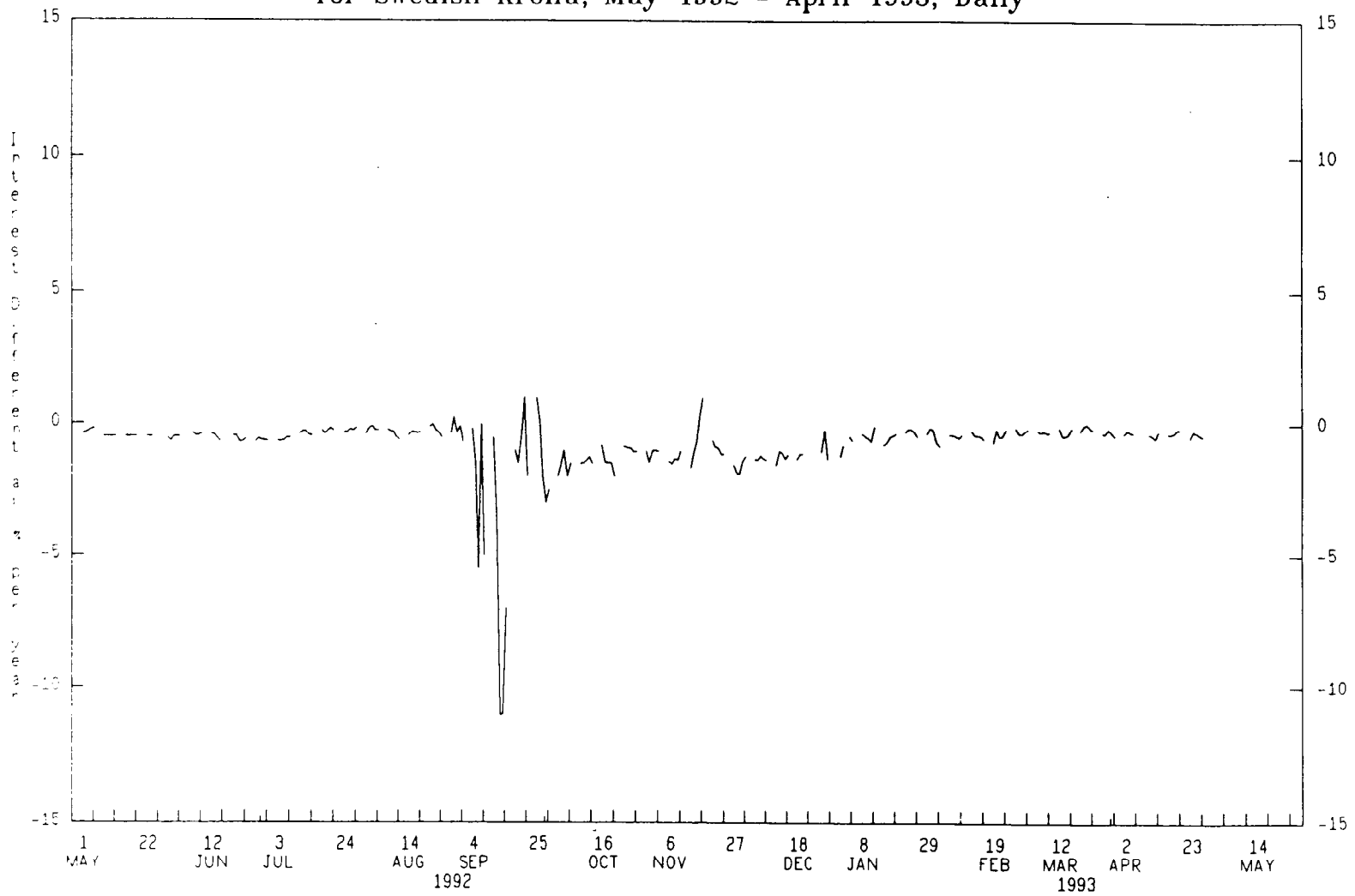
3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for Norwegian Krone, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

Chart 6

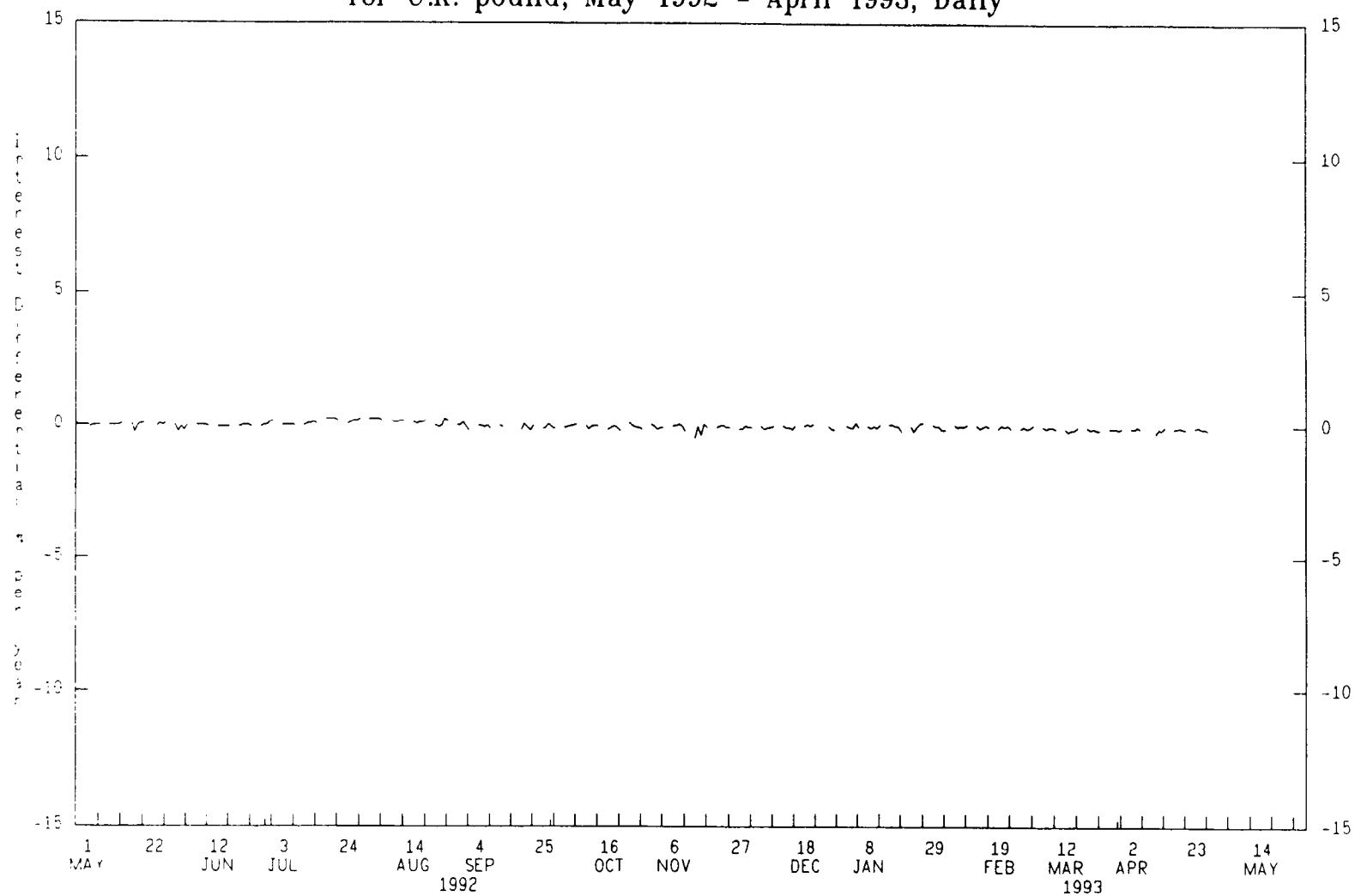
3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for Swedish Krona, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

Chart 7

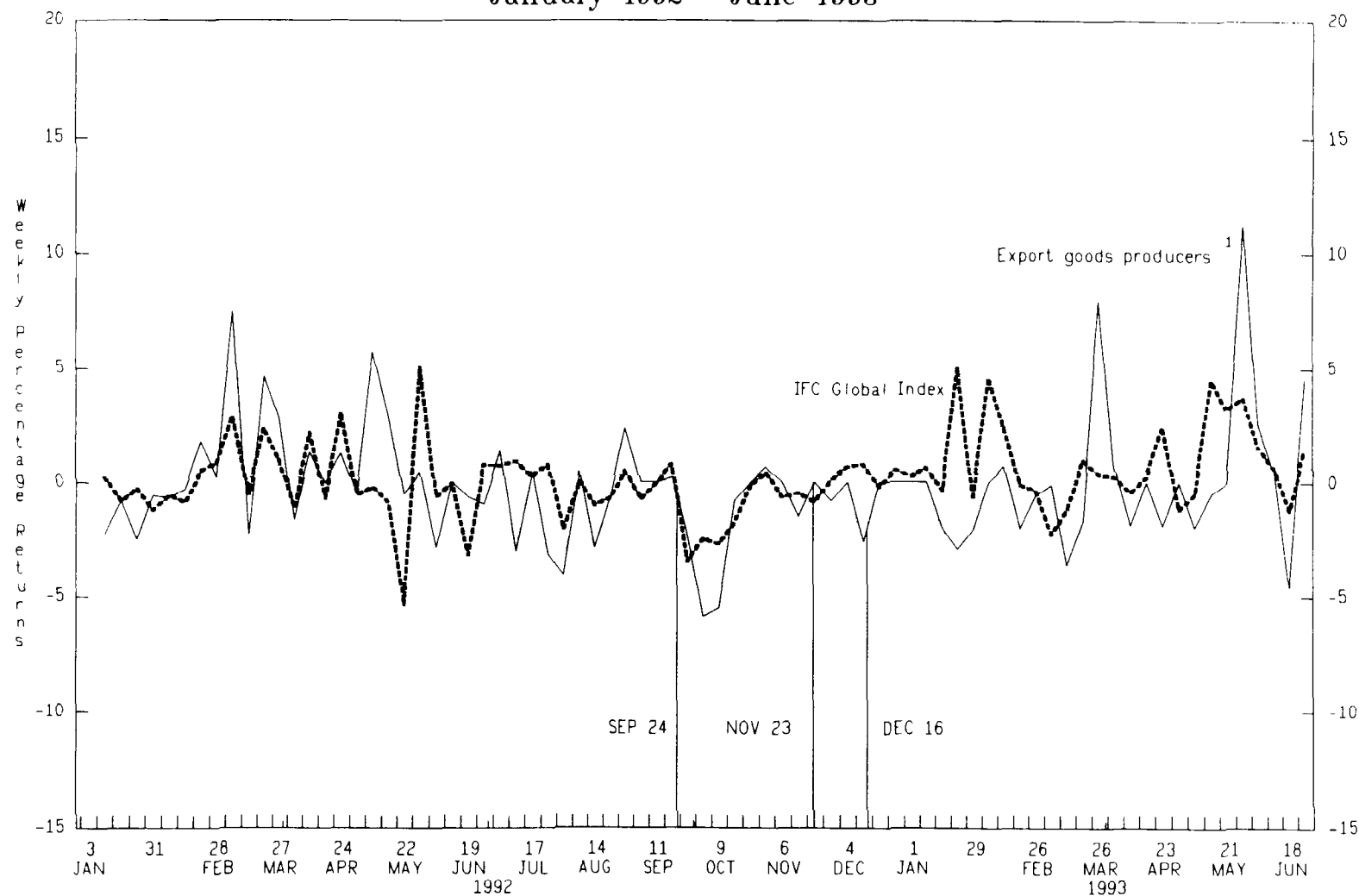
3-month Eurodeposit Rate Minus 3-month Domestic Interbank Rate,
for U.K. pound, May 1992 - April 1993, Daily



Note: Rates are closing bids
Source: DRIFACS data bank

Chart 8

Weekly Percentage Returns on Stocks of Selected Portuguese Firms
January 1992 - June 1993

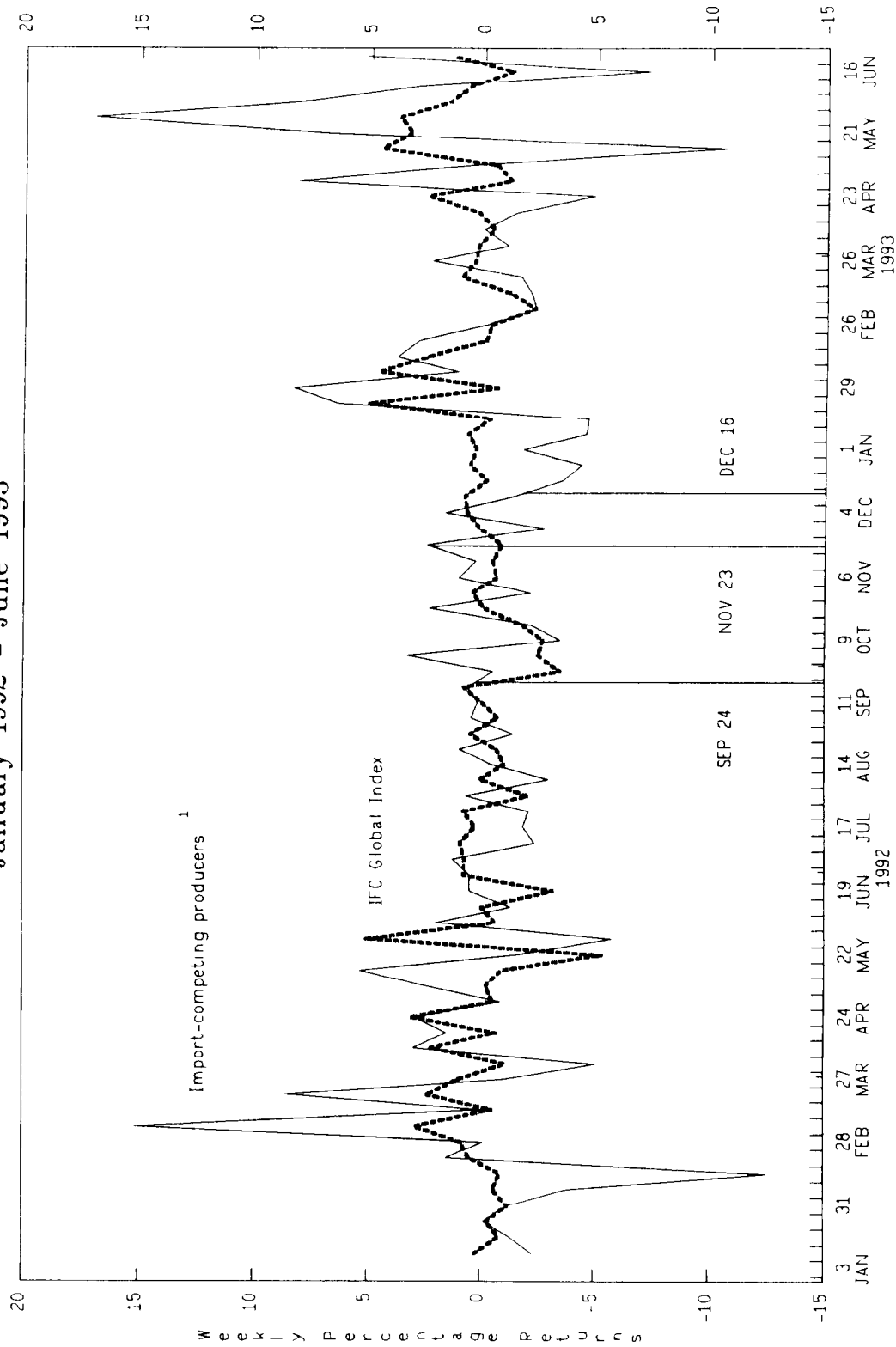


1. Median for 5 firms.

Source: International Finance Corporation

Chart 9

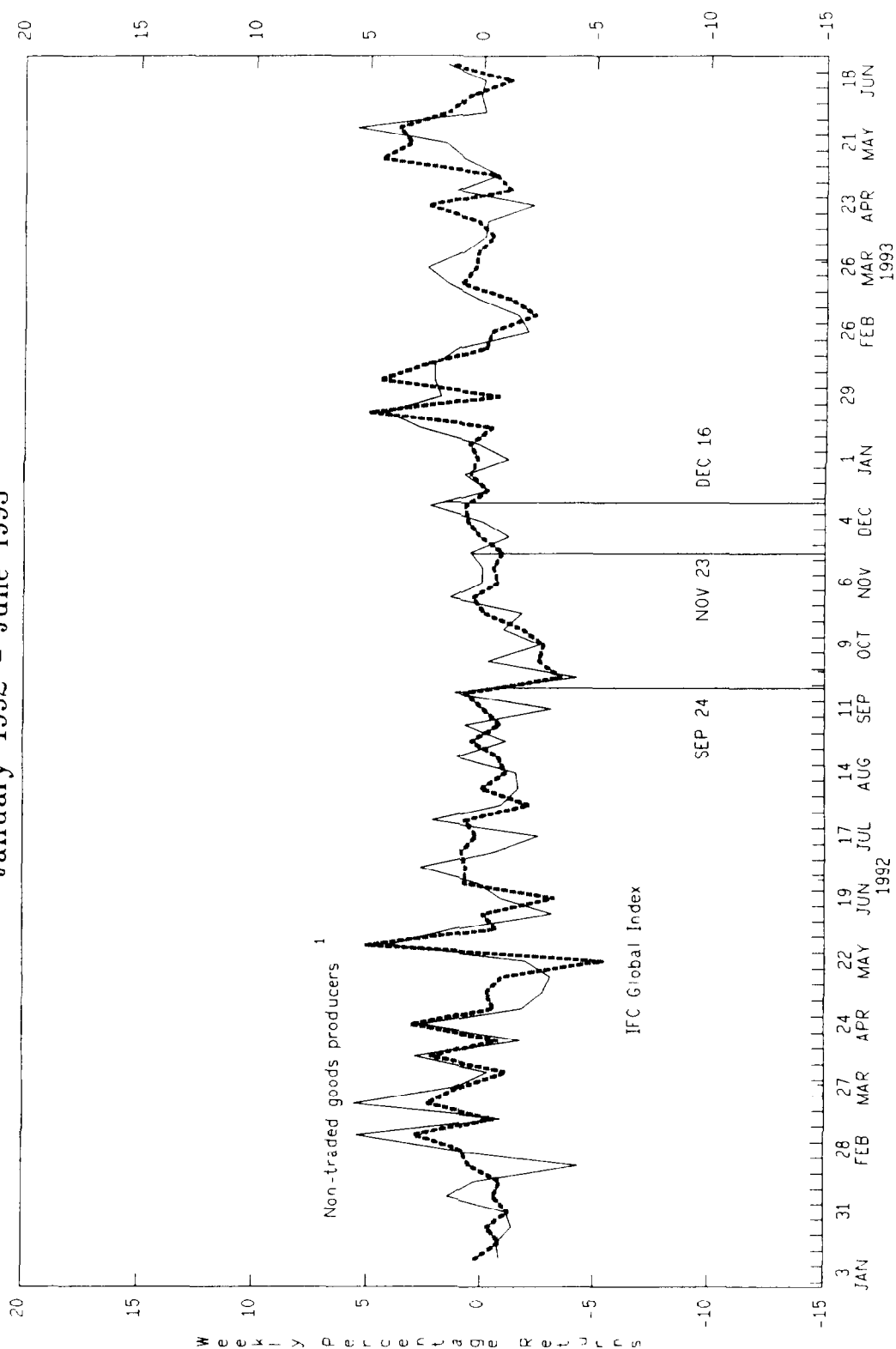
Weekly Percentage Returns on Stocks of Selected Portuguese Firms
January 1992 - June 1993



1. Mean for 2 firms.
Source: International Finance Corporation

Chart 10

Weekly Percentage Returns on Stocks of Selected Portuguese Firms
January 1992 - June 1993



1. Median for 4 firms.
Source: International Finance Corporation

References

- Argy, Victor, "International Financial Liberalization--The Australian and Japanese Experiences Compared," Bank of Japan Monetary and Economic Studies, Vol. 5, No. 1 (May 1987), pp. 105-167.
- Browne, Francis X., and Paul D. McNelis, "Exchange Controls and Interest Rate Determination with Non-Traded Assets: the Irish-United Kingdom Experience," Journal of International and Money Finance, Vol. 9, No. 1 (March 1990), pp. 41-59.
- Eichengreen, Barry, and Charles Wyplosz, "Mending Europe's Currency System," The Economist, Vol. 327, No. 7814 (June 5-11, 1993), p. 89.
- Galy, Michael, Gonzalo Pastor, and Thierry Pujol, Spain: Converging with the European Community, Occasional Paper No. 101 (Washington: International Monetary Fund, February 1993).
- Goldstein, Morris, et al., International Capital Markets: Part 1. Exchange Rate Management and International Capital Flows, World Economic and Financial Surveys (Washington: International Monetary Fund, April 1993).
- Gutián, Manuel, "Capital Account Liberalization: Bringing Policy in Line with Reality" (unpublished, International Monetary Fund, 1993).
- International Monetary Fund, World Economic Outlook: Interim Assessment, World Economic and Financial Surveys (Washington: International Monetary Fund, January 1993).
- _____, Policy Development and Review Department, "Recent Experiences with Surges in Capital Inflows" (unpublished, May 1993).
- Linde, Luis M. "Measures of the Bank of Spain in September and October 1992 Penalising Currency Speculation" (unpublished, Spain, Bank of Spain, 1993).
- Mathieson, Donald J., and Liliana Rojas Suárez, Liberalization of the Capital Account: Experiences and Issues, Occasional Paper No. 103 (Washington: International Monetary Fund, March 1993).
- Otani, Ichiro, "Exchange Rate Instability and Capital Controls: the Japanese Experience, 1978-1981," in Exchange Rate and Trade Instability: Causes, Consequences, and Remedies ed. by David Bigman and Teizo Taya (Cambridge, Massachussets: Ballinger, 1983).

