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Keith S. Rosenn

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The Effects of Inflation on the Law of Obligations in Argentina, Brazil, Chile and Uruguay*

by Keith S. Rosenn**

I. INTRODUCTION

Inflation has been a chronic socio-economic problem in several Latin American countries ever since World War II. Were a prize given for the dubious distinction of achieving the highest rates of inflation in the world, the leading contenders would almost always be the countries of the southern cone of South America. An International Monetary Fund (IMF) study of 53 countries for which price level data were available between 1949 and 1965 placed six countries in a class by themselves, far surpassing the inflation rates of all the other countries.1 One of the six was Korea, which had been a battleground during much of the period under study. The other five countries - Argentina, Bolivia, Brazil, Chile, and Uruguay - had no war to blame for their high rates of inflation. In 1957-1958 Bolivia managed to squeeze the genie of inflation back into the bottle via a brutal stabilization program,2 but the other four Latin American countries have been unable to replicate that feat. During the 1960-1965 period they managed to achieve the highest inflation rates of all the countries in the IMF study. In first place during this period was Brazil with an annual average inflation rate of 58 percent, followed by Uruguay with 32 percent, Chile with 25 percent, and Argentina with 24 percent.3

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^{**}Professor of Law, Ohio State University.

^{1.} Adekunle, Rates of Inflation in Industrial, Other Developed, and Less Developed Countries, 1949-1965, 15 I.M.F. STAFF PAPERS 531 (1968) [hereinafter cited as Adekunle].

^{2.} For an insider's account of this stabilization program, see G. Eder, Inflation and Development in Latin America: A Case History of Inflation and Stabilization in Bolivia (1968).

^{3.} Adekunle, supra note 1, at 536.

During the 1970s the pace of inflation has accelerated sharply in Argentina, Chile, and Uruguay. In the 1971-1977 period Chile had an annual average inflation rate of 286.4 percent, by far the world's highest. Argentina was second with an annual average of 174.5 percent, followed by Uruguay with an annual average of 74 percent, and Brazil with an annual average of 28.6 percent. (Ominously, Colombia and Peru, with annual average inflation rates of 22.4 percent and 21.5 percent, respectively, were not far behind.)4

The U.S. reader can obtain a greater sense of perspective by considering the effect these sustained high rates of inflation have had on indexed wages and exchange rates. If a worker earning \$1,000 a month in 1971 had his salary indexed to the Chilean consumer price index, in 1977 he would have been earning \$551,872 a month. One new Chilean peso was worth U.S. \$62.50 in 1971; as of mid-January 1979 there were 34.1 pesos to one U.S. dollar. The dollar exchange rate for the Argentine peso was U.S. \$1 = 5 pesos in 1971; in mid-January 1979 it stood at U.S. \$1 = 1028 pesos. Moreover, the dollar has itself depreciated considerably in the world's currency marts. If one uses the International Monetary Fund's Special Drawing Right (SDR)⁵ as a basis of comparison, the rate of devaluation is even more striking. There were 5.43 Argentine pesos to a SDR in 1971; on January 25, 1979 there were 1350, an increase of nearly 250 times.⁶

There are three unique factors about the inflationary processes in these Latin American countries. First, these inflations are chronic. They have been going on steadily for more than thirty years in Argentina, Brazil, and Chile, and for more than twenty years in Uruguay. Second, these inflations have never degenerated into runaway or hyperinflation, such as Germany, Austria, Hungary, Poland, and Russia experienced in the post-World War I period. Instead, as can be seen from Table I, these Latin American inflations have alternated between cantering and galloping levels of intensity, with an occasional trot during the peak of a stabilization program. Third, these Latin American inflations are not attributable to any of the usual causes of severe inflation: external war, foreign occupations, or revolution. Coups d'état have

^{4.} These inflation rates are calculated from price data appearing in INT'L MONETARY FUND, 31 INT'L FINANCIAL STATISTICS No. 9 (Sept. 1978) and 29 INT'L FINANCIAL STATISTICS No. 11 (Nov. 1976).

^{5.} The SRD is a kind of paper gold, created as a new reserve asset by the International Monetary Fund in 1969. Its unit value was orginally pegged to the gold value of the U.S. dollar. In the wake of the 1971 decision by the United States to allow its currency to float and to end official convertibility of dollars for gold, the value of the SDR is determined daily by reference to a weighted average of the currencies of 16 member nations with more than one percent of the world's exports of goods and services during a five-year period. INT'L MONETARY FUND, ANNUAL REPORT 56-57 (1978).

^{6. 8} I.M.F. SURVEY 45 (No. 3, Feb. 5, 1979).

^{7.} See F. Pazos, Chronic Inflation in Latin America 13-16 (1972).

^{8.} Id. at 18-19.

TABLE I⁹

Average Annual Percentage Increases in Consumer Price Indexes of Argentina, Brazil, Chile, and Uruguay, 1949-1977

Year	Argentina	Brazil	Chile	Uruguay
1949	31	5	19	5
1950	26	9	15	-5
1951	37	12	22	12
1952	39	17	22	17
1953	4	14	26	5
1954	4	22	56	5
1955	12	23	76	8
1956	13	21	66	7
1957	25	16	29	15
1958	32	15	26	18
1959	114	39	39	40
1960	27	29	12	39
1961	14	33	8	23
1962	26	52	14	11
1963	26	70	44	21
1964	22	92	46	43
1965	29	66	29	57
1966	32	41	23	74
1967	29	31	18	89
1968	16	22	27	125
1969	8	22	31	. 21
1970	, 14	23	33	16
1971	35	20	19	24
1972	59	16	100	78
1973	61	13	338	97
1974	23 ·	28	503	77
1975	183	29	374	81
1976	543	42	312	51
1977	176	44	92	58

been triggered, at least in part, by a regime's apparent inability to control inflation, but seldom has inflation been triggered by revolutions.¹⁰

The causes of these inflations are complex and much mooted. Space limita-

^{9.} The statistics in this Table are derived from id. at 14 for the period through 1970, and INT'L MONETARY FUND, INTERNATIONAL MONETARY STATISTICS (Nov. 1976) and INT'L MONETARY FUND, INTERNATIONAL MONETARY STATISTICS (Sept. 1978) for the period 1970-1977.

^{10.} The inability to control spiralling inflations was one of the key factors inducing the military to topple Goulart in Brazil in 1964, Allende in Chile in 1973, and Peron in Argentina in 1976.

tions preclude their exploration here.¹¹ Suffice it to say that few policymakers in Argentina, Brazil, Chile, and Uruguay entertain any serious notions about completely eliminating inflation in their respective countries. Most would be quite content to reduce the inflation rate to so-called "normal" levels — approximately 10 to 15 percent a year.¹²

Legal systems depend on money to perform three essential functions. Money serves as: (1) a means of payment, facilitating the exchange of goods and services; (2) a store of value, facilitating savings and deferred payment of obligations; and (3) a measure of value, permitting a common method of determining the economic worth of goods and services.¹³ After decades of severe inflation the currencies of Argentina, Brazil, Chile, and Uruguay no longer function either as measures or stores of value. Living with inflation has forced the legal systems of these countries to develop alternative methods for performing these vital functions.

Inflation affects legal systems in myriad ways. Taxation, rents, mortgages, insurance, pensions, corporate balance sheets, public utility rates, and damage awards are among the legal institutions most seriously distorted by inflation. Rather than attempt to discuss all of these areas, this article will focus on the law of obligations, a topic which lies at the heart of any civil law system and encompasses both torts and contracts.

This is a particularly appropriate time to study the effects of inflation on Latin American legal institutions. Inflation is all too vividly our own problem. Legal institutions in the United States are experiencing currently many of the same distortions as those in South American countries. Because of the much greater intensity and duration of the South American inflationary experience, these distortions are amplified many times. Moreover, the magnitude of the inflationary experience has forced South American legislators and courts to confront the legal distortions generated by inflation and to devise imaginative solutions to prevent the breakdown of legal structures. There is much we in the United States can learn from studying this aspect of Latin American law.

II. THE RISE OF VALORISM AND THE EROSION OF NOMINALISM

During most of recorded history, the doctrine of metallism has dominated legal perceptions about the value of money. Metallism equates the value of money with the value of a determined weight and fineness of precious metal, generally gold or silver. So long as money consisted of chunks of precious metals, metallism presented few legal problems. But with the advent of

^{11.} See generally S. WACHTER, LATIN AMERICAN INFLATION: THE STRUCTURALIST-MONETARIST DEBATE (1976); Baer, The Inflation Controversy in Latin America: A Survey, 2 LATIN AM. RESEARCH REV. 3 (1967).

^{12.} See, e.g., S. ROBOCK, BRAZIL: A STUDY IN DEVELOPMENT PROGRESS 127 (1975).

^{13.} Doucet, Le Franc du 8 Mars 1803 au Decembré 1958, in Influence De La Dépréciation Monétaire Sur La Vie Juridique Privée 1, 3-4 (P. Durand ed. 1961).

coinage, an activity soon monopolized by sovereigns for prestige and profit, legal theory had to confront problems presented by widespread debasement and alteration in the value of coins. If a debtor had agreed to repay ten gold ducats (of unspecified gold content), and between the date of the loan and the date of repayment, the sovereign reduced the gold content of the ducat by 50 percent, was the debtor obligated to repay ten or twenty ducats?

During the Middle Ages it was generally agreed that the debtor was required to repay the quantity of gold borrowed rather than the number of monetary units. This conclusion was derived partly from Roman law, which, as interpreted by the Glossators and post-Glossators, regarded the metallic content of money as the sum and substance of pecuniary obligations. ¹⁴ It also was derived in part from a sense of natural justice. Since canon law forbade the charging of interest, it was deemed only just to protect the creditor against any loss for monetary depreciation. ¹⁵

This view was seriously challenged in 1546 by the enormously influential French jurist, Charles Dumoulin (Molinaeus), in his treatise Tractatus Contractuum et Usurarum. In his treatment of usury, Dumoulin discredited the Canonists' metallistic interpretation of Roman law and vigorously criticized the view that money is a commodity whose value is determined by its metallic content. Laying the doctrinal support for nominalism, Dumoulin contended that the only value of money for juridical purposes is the value imposed by the sovereign. 16 Dumoulin's arguments struck a responsive chord with the French monarchy, which was seeking to consolidate royal power at the expense of feudal princes and the church. Within five years of the appearance of Dumoulin's treatise, the French king issued a decree requiring all contracts to specify pecuniary amounts by the nominal value of coins instead of metallic weights. 17

During the 16th and 17th centuries there were bitter doctrinal disputes between adherents of nominalism and metallism. The former urged that for the purpose of discharging legal obligations, the value of money should be its face or nominal value, which should be irrebutably presumed constant. The latter urged that legal obligations should be discharged only upon payment of a sum which corresponded to the intrinsic metallic value of the sum at the time the obligation had been incurred. Nominalism is far more convenient than metallism, for it avoids the difficult task of inquiring into the relative values of goods and services over time. This advantage made nominalism more useful

^{14.} F. MANN, THE LEGAL ASPECT OF MONEY 79 (3d ed. 1971) [hereinafter cited as F. MANN].

^{15.} A. NUSSBAUM, MONEY IN THE LAW NATIONAL AND INTERNATIONAL 176 (rev'd ed. 1950) [hereinafter cited as A. NUSSBAUM].

^{16.} Id. at 177; F. MANN, supra note 14, at 177; A. WALD, A CLÁUSULA DE ESCALA MÓVEL 47 (2d ed. 1959).

^{17.} F. MANN, supra note 14, at 79-80.

to the development of modern capitalism. This greater utility, coupled with royal sponsorship, ultimately led to widespread acceptance of nominalism during the 17th and 18th centuries.¹⁸

The orientation of one of the world's most highly influential legal documents, the Napoleonic Code, is decidedly nominalistic. This orientation is most explicitly embodied in Article 1895, which provides:

The obligation which results from a loan of money is always only the numerical sum stated in the contract. If the value of money has increased or decreased before the time of payment, the debtor must repay only the numerical sum lent in the lawful currency at the time of payment.¹⁹

Latin American codifiers were heavily influenced by the Napoleonic Code, and similar provisions were incorporated into most of Latin American civil codes.²⁰ Although stated only in terms of loans, the nominalist principle generally has been applied to all obligations to pay sums of money.²¹

Nominalism presupposes a reasonably stable currency.²² During severe inflation, when currencies cease to function in an economic sense either as a measure or store of value, there is often a juridical reaction against the rigidities of the nominalist principle. Prior to the 20th century, judicial reactions against nominalism were essentially based on a metallistic concept of the value of money.²³ During the highly inflationary post-World War I period,

Nominalism primarily applies to fluctuations in the value of money, which are slow, gradual, and moderate. There is no certainty how English law would react in the unlikely event of the pound sterling depreciating in so violent, sudden, and extreme a manner as to lead to a collapse of the monetary system. Experience proves that in such a contingency nominalism cannot, in practice, be maintained and that the legislator or, failing him, the judge must afford relief.

Id. at 92.

Perhaps nowhere is the presupposition of monetary stability more clearly articulated than in the note of Velez Sársfield, the principal draftsman of the Argentine Civil Code, to Article 619, which embodies the nominalist principle. Velez wrote:

We abstain from projecting laws to settle the much debated question regarding the obligation of the debtor when there has been alteration in the currency, because that alteration would have to be ordered by the national legislative body, an almost impossible occurrence. . . . If the intrinsic value of money is altered — says the Code of Austria — the person who received it must reimburse the full value that it had at the time of the loan. If one had to promulgate a law, supposing the alteration of currencies, we would accept the article of the Austrian Code.

CÓDIGO CIVIL art. 619 note (Argen.) (translated by the author).

^{18.} T. ASCARELLI, PROBLEMS DAS SOCIEDADES ANÔNIMAS E DIREITO COMPARADO 194 (1945).

^{19.} CODE NAPOLEON art. 1895 (translated by the author).

^{20.} E.g., CÓDIGO CIVIL art. 619 (Argen.); CÓDIGO CIVIL art. 2199 (Chile); CÓDIGO CIVIL art. 2389 (Mex.); CÓDIGO CIVIL art. 2199 (Uruguay); CÓDIGO CIVIL art. 1737 (Venez.).

^{21.} F. MANN, supra note 14, at 80-81.

^{22.} As Professor Mann has observed:

^{23.} For example, American courts utilized the gold value of Confederate currency to revalorize contracts which had become worthless after the Civil War. Dawson & Cooper, The Effect of Inflation on Private Contracts: The United States, 1861-1879, 33 MICH. L. REV. 706 (1934)

particularly in Europe, a group of jurists and economists reacted against the injustice resulting from adherence to the nominalist principle by urging that the legal value of money be ascertained by reference to its purchasing power rather than its intrinsic metallic value. These modern heirs of the metallists have been dubbed "valorists."²⁴

The basic tenet of valorism is that pecuniary obligations should be discharged only upon payment of a sum which corresponds to the real economic value of the obligation owed. The real economic value of money is its purchasing power rather than the number of units of gold or silver for which it can be exchanged. By the end of World War I a number of countries were publishing weighted price indexes on a regular basis.²⁵ It was to these indexes that the valorists turned to measure the value of money. Quite correctly, the valorists perceived that the best measure of money's purchasing power is a general price index, such as the consumer or wholesale price index.

The valorists were particularly influential during the 1920s in Germany, which was the only country in which the judiciary initiated and dominated an attempt to revise contractual obligations along largely valoristic lines. ²⁶ But once the mark had been restabilized, Germany reverted to nominalism. During the Great Depression of the 1930s, jurists ceased to be concerned with problems of inflation and the influence of valorism waned.

In the past two decades there has been a renascence of valorism in the southern cone of South America. In order to permit their legal systems to continue to function with such continuously high rates of inflation, jurists and legislatures in Argentina, Brazil, Chile, and Uruguay have resorted to indexation, or monetary correction as it is frequently called, to readjust a great variety of legal transactions. In these countries wages, back pay awards, interest payments, condemnation awards, rents, mortgages, bonds, corporate balance sheets, loans, social security payments, and the income tax system are adjusted periodically in accordance with coefficients derived from the price indexes.²⁷ This does not mean that the legal systems of these countries have jet-

[[]hereinafter cited as Dawson & Cooper]. The story of legislative efforts in the United States and France to revalorize worthless currency by reference to specie standards is told in E. HARGREAVES, RESTORING CURRENCY STANDARDS (1926) [hereinafter cited as E. HARGREAVES].

^{24.} E. HIRSCHBERG, THE NOMINALISTIC PRINCIPLE 74-75 (1971).

^{25.} A. NUSSBAUM, supra note 15, at 28-29; G. WARREN & F. PEARSON, PRICES 18-23 (rev'd ed. 1933); Walsh, Index Numbers, 7-8 ENCYCLOPEDIA OF THE SOCIAL SCIENCES 652-54 (rev'd ed. 1937).

^{26.} A. NUSSBAUM, supra note 15, at 215. See generally Dawson, Effects of Inflation on Private Contracts: Germany, 1914-1924, 33 MICH. L. REV. 171 (1934) [hereinafter cited as Dawson].

^{27.} Discussion of all of these types of monetary correction is beyond the scope of this article. A much more complete discussion, albeit not specifically focused upon these four Latin American countries, appears in K. ROSENN, LAWAND INFLATION (forthcoming). For Argentina, see L. Gurfinkel de Wendy, Depreciacion Monetaria: Revaluacion de Deudas Dinerarias (1977)

tisoned nominalism and embraced valorism as a general principle. Technically, nominalism is still the general rule. Indexation generally applies only if the parties to a contract have so stipulated or there is a specific legal norm mandating that result. Though there are still important transactions which are not indexed, most legal transactions are structured by taking into account changes in the price indexes.

III. REVISION OF CONTRACTS BADLY DISTORTED BY UNANTICIPATED INFLATION

A sharp surge in the inflation rate places severe pressure on the legal institution of contracts. Performance of agreements entered into upon the assumption that the value of money is relatively stable creates substantial hardship whenever unanticipated inflation vitiates that assumption. This hardship is most apparent in contracts whose performance is spread out over a considerable period of time, such as construction contracts, mortgages, leases, insurance policies, annuities, or installment sales. In this circumstance legislators and judges come under considerable pressure from two distinct economic classes: promisors whose contractual obligations have become unduly burdensome because of unanticipated inflation, and long-term creditors whose claims will be virtually wiped out if debtors are allowed to pay them off in badly depreciated currency.

These pressures pose a serious dilemma for legislatures and courts. If they decide to permit revalorization of certain contractual obligations, they run the risk of undermining transactional security. They must also resolve the thorny question of which categories of obligations should be valorized and on what bases. Should the legislature merely attempt to lay down broad guidelines and rely on the courts to attempt to reach equitable solutions on a case-by-case basis? Or should the legislature set out with considerable specificity the categories of obligors entitled to relief? Should the legislature go further and set out what relief each category is entitled to receive?

The economic, social, and legal problems involved in any legislative or judicial attempt to revalorize obligations are immense. First is the largely intractable problem of what standard of value to substitute for money. Prices gyrate widely during galloping inflation, and the price indexes are a somewhat uncertain guide to the mercurial changes in the prices of many goods and services. Prices frequently vary considerably from day to day and from region to

[hereinaster cited as L. Gurfinkel de Wendy]; for Brazil, see J. Chacel, M. Simonsen, & A. Wald, Correção, Monetária (1970) [hereinaster cited as J. Chacel, et al.]; for Chile, see Gesche Müller, La Compensatión de la Desvalorización Monetaria en el Cumplimiento de las Obligaciones, 41 Revista de Derecho [Rev. Der.] 7 (Jan.-June 1974) [hereinaster cited as Gesche Müller]; Alvarez Nuñez, Las Obligaciones de Dinero en el Código Civil, 41 Rev. Der. 43 (Jan.-June 1974). For Uruguay, see D. Ferrere-Lamaison, El Dinero En La Teoria Juridica (1974).

region. Price controls and shortages exacerbate the problem, for index makers all too often utilize official prices, even though commodities are nowhere to be found at such prices. 28 In addition, governments have occasionally decided that it is easier to control price indexes than to control inflation, 29 a phenomenon which further exacerbates the reliability problem. But despite these difficulties, coefficients derived from the price indexes are likely to be more reliable measures of value than foreign exchange rates or gold prices. Foreign exchange rates of Latin American countries historically have been pegged artificially rather then freely floating, and gold prices reflect speculative pressures and panicky flights from currency.

Second, it is extremely difficult to reconstruct the intentions of parties who have contracted in depreciating currency. When people enter into contracts payable in Argentine, Brazilian, Chilean, or Uruguayan currency, it is only logical to assume that one or more of the parties has assumed the risk of a certain amount of inflation. But is it reasonable to assume that one party has assumed the risk of any rate of inflation? If the annual inflation rate had been 10 percent for the past five years, is it reasonable to charge a person who lent money at 12 percent annual interest with all of the economic loss resulting from a tenfold spurt in the inflation rate? Suppose the lender was limited to 12 percent by a usury statute, or suppose protective devices such as index clauses were prohibited by law? If one does decide to revalorize contractual obligations, doing so on the assumption that the parties contemplated a stable cur-

^{28.} For example, the official Chilean consumer price index was widely believed to have understated the actual inflation rate by a considerable amount during the Allende period because it failed to take into account the widespread black markets spawned by extensive price controls. G. Jud, Inflation and the Use of Indexing in Developing Countries 81 (1978) [hereinafter cited as G. Jud].

^{29.} Brazilian manipulation of the price indexes is notorious. In the first quarter of 1966 the weight accorded to rent in Rio de Janeiro's cost-of-living index, generally regarded as the key inflation barometer in the country, was virtually halved without a new market basket survey. This ad hoc reweighting coincided with the introduction of legislation relaxing rent controls. See Rosenn, Controlled Rents and Uncontrolled Inflation: The Brazilian Delimma, 17 Am. J. Comp. L. 239, 255 n.66 (1969) [hereinafter cited as Rosenn, Controlled Rents]. In October of 1969, when a frost destroyed much of the coffee crop, changes in export prices were eliminated from the wholesale price index, which was used to readjust government bonds for inflation. J. CHACEL, et al, supra note 27, at 310. In December of 1972, when the inflation rate appeared to be declining, the Brazilian government's estimate of the future inflation rate was given equal weight to past inflation recorded by the wholesale price index in order to reduce the amount by which government bonds were readjusted. Correção Monetaria e Realimentação Inflacionária, Conjuntura Econômica [Conj. Econ.], June 1976, 88, 92. This estimate of future inflation was eliminated from the index in March of 1974, when it became apparent that the rate of inflation was increasing. In 1975 the government decided to purge the wholesale price index of "inflationary accidents," characterized as seasonal fluctuations, droughts, frosts, and oil import. See Rosenn, Adjusting Taxation of Business Income for Inflation: Lessons from Brazil and Chile, 13 TEX. INT'L L. J. 165, 192 (1978) [hereinafter cited as Rosenn]. A recently revealed classified Brazilian government study and a World Bank study estimated the actual rise in Rio's cost of living in 1973 at 26.6 percent; the cost-of-living index officially registered only 13.7 percent for 1973. Vidal, Brazilian Labor Federation Brings Court Action Against Government, N.Y. Times, Dec. 11, 1977, § I, at 64, col. 3.

rency is likely to be grossly unfair to debtors; failure to revalorize on the assumption that the parties fairly contemplated a sharp rise in the "normal" inflation rate is likely to be equally unfair to creditors.

Generally speaking, the legislatures of these Latin American countries have left the question of whether to relieve parties from contracts which have become unduly burdensome because of inflation to the courts. Unlike American, Austrian, French, German, and Polish legislatures, all of which enacted general legislation revalorizing specific categories of obligation expressed in badly depreciated currency,30 these Latin American legislatures have mandated revalorization only in a very limited number of circumstances. Such exceptional legislation generally has been aimed at protecting the government's own patrimony or the smooth operation of government services rather than bailing out improvident contractors. Thus, in 1977, Argentina enacted an extraordinary measure imposing prospective revalorization, in accordance with coefficients derived from an industrial wage index for Buenos Aires, on all unindexed debts and mortgages contracted with the National Housing Bank.31 One of the first indexation statutes adopted in Brazil and Chile provided for monetary correction of delinquent tax debts to discourage the popular practice of borrowing from the government at negative interest rates by failing to pay one's taxes on time. 32 A similar statute was enacted by Argentina in 1976.33 In 1967 Brazil adopted legislation providing for revision of public works contracts in accordance with a formula that relieved the firm contracting with the government of 90 percent of the inflation experienced following submission of the bid.34

^{30.} The experiences of these countries with statutes scaling debts in collapsed currencies by given percentages are described in E. HARGREAVES, supra note 23; Dawson & Cooper, supra note 23; Dawson, supra note 26; Picard, Le Remboursement des Dettes et la Valorisation des Créances dans les Pays à Monnaie Dépréciée, 51 CLUNET 918 (1924).

^{31.} Law No. 21.508 of Feb. 21, 1977 (Argen.). Debtors were afforded the option of avoiding revalorization by paying off their debts with the National Mortgage Bank in full within 90 days of the statute's effective date. *Id.* This statute was enacted because inflation had rendered the Bank's receipts from interest and amortization insufficient to pay operating expenses, let alone maintain its capital.

^{32.} Since 1964, Brazil has subjected back taxes to monetary correction in accordance with coefficients derived from wholesale price index. Law No. 4.357 of July 16, 1964, art. 7 (Braz.). Late penalties have also been subject to monetary correction since 1967. Decree-Law No. 326 of May 8, 1967, art. 12, (Braz.).

Chile has required monetary correction of back tax debts since 1965. Late tax payments are now charged interest of 1.5 percent a month, a flat 5 percent penalty, and monetary correction in accordance with coefficients derived from the consumer price index. Rosenn, *supra* note 29, at 187.

^{33.} Law No. 21.281 of April 2, 1976 (Argen.). All delinquent tax payments must be updated by coefficients derived from the wholesale price index between the date the obligation is actually paid and the month prior to the date the payment was due.

^{34.} Decree-Law No. 185 of February 23, 1967 (Braz.), regulated by Decree No. 60.407 of March 11, 1967 (Braz.). Similar legislation has been adopted by several Brazilian states. See J. CHACEL, et al, supra note 27, at 73-80.

One exception is a unique statute adopted in 1976 by Argentina requiring that all debts discharged under the aegis of the bankruptcy courts be monetarily corrected by coefficients from the wholesale price index for nonagricultural products.³⁵ Another is a sizeable group of statutes requiring monetary correction of specially regulated contractual obligations, such as leases subject to rent control³⁶ or collective wage agreements.

Thus, the legislatures of these countries generally left to the courts the task of revising or abrogating contracts which have become unduly onerous because of unanticipated inflation. The courts have intervened in this area sparingly. Almost always, the doctrinal device utilized has been the theory of imprevision.

A. The Theory of Imprevision

The origins of the theory of imprevision go back to Roman law and the medieval doctrine of rebus sic stantibus, which posits that every contract contains a tacit clause (or implicit condition subsequent) ending or modifying its obligatory force whenever there has been such a substantial change in the state of facts prevailing at the date the contract was made as to render its performance unjust. This theory was espoused by the canonists of the 12th and 13th centuries and applied by the ecclesiastical courts, who smelled usury whenever one party's bargain seemed overly generous. It was elaborated by the post-Glossators and incorporated into Italian and German doctrine until the 18th century, when it was consigned to the doctrinal scrap heap because of its threat to the security of commercial transactions.³⁷ In the face of the economic disequilibria resulting from World War I, many European jurists sought theoretical justifications for excusing promisors from contracts whose performance had become exceedingly burdensome. They reclaimed rebus sic stantibus and recycled it under a variety of names, each with a slightly different nuance.38

^{35.} Law No. 21.488 of December 30, 1976, arts. 1-2 (Argen.). This statute avoids the unjust result of treating as equals creditors who have been owed the same nominal sum by the bankrupt for varying lengths of time. It also reduced the attractiveness to debtors with substantial non-cash assets of lightening their debts by seeking compositions or arrangements in the bankruptcy courts.

^{36.} E.g., Law No. 20.625 of Jan. 21, 1974 (Argen.), replaced by Law No. 21.342 of June 30, 1976 (Argen.); Law No. 4.494 of Nov. 25, 1964 (Braz.), as modified by Decree-Law No. 6 of Apr. 14, 1966 (Braz.); Law No. 5.334 of Oct. 12, 1967 (Braz.); Law No. 6.146 of Nov. 29, 1974 (Braz.); and Law No. 6.423 of June 17, 1977 (Braz.); Law No. 17.600 of Jan. 17, 1972 (Chile); Law No. 13.292 of Oct. 1964 (Uruguay); and Law No. 14.219 of July 4, 1974 (Uruguay). The Brazilian experience in indexing rent control statutes is analyzed in Rosenn, Controlled Rents, supra note 29.

^{37.} See 6 M. Plainol & G. Ripert, Triaté Pratique De Droit Civil Français 526-27 (2d ed. P. Esmein 1952) [hereinafter cited as Plainol & Ripert]; A. Medeiros Da Fonseca, Caso Fortuito e Teoria Da Imprevisão 198-200 (3d ed. 1958) [hereinafter cited as A. Madeiros da Fonseca].

^{38.} French, Italian, and Polish law have developed the theorie de l'imprévision. German and

There is no single definition of the theory of imprevision, but its core concept is that a court may annul or revise a contract whenever there has been a substantial and unforeseen change in the economic conditions prevailing at the time the contract was made, rendering performance by the obligor exceedingly onerous, though not objectively impossible.³⁹ The doctrine tentatively crept into Brazilian law through doctrine and judicial decisions in the 1930s to permit escape from contractual obligations which had become unduly burdensome because of deflation and the economic dislocation associated with the Great Depression.⁴⁰ During the 1940s, when construction prices soared because of wartime shortages and inflation, a number of Brazilian courts permitted revision or termination of unduly burdensome contracts,41 despite the explicit language of Article 1246 of the Civil Code apparently prohibiting such relief.⁴² But since the 1950s Brazilian case law has tended to accept the doctrine of imprevision in theory but deny its application to contracts which have become unduly onerous because of unanticipated inflation.⁴³ After so many years of chronic inflation, the Brazilian courts have developed a deaf ear to the

Swiss law have developed the doctrines of Geschaftsgrundlage, economic ruin, equivalence of performance, and good faith. The Scandinavian countries expanded the concept of physical impossibility to include economic impossibility. See generally A. MEDEIROS DA FONSECA, supra note 37; Smit, Frustration of Contract: A Comparative Attempt at Consolidation, 58 COLUM. L. REV. 287 (1958); Rodhe, Adjustment of Contracts on Account of Changed Conditions, 3 SCANDINAVIAN STUD. L. 151 (1959).

- 39. See A. MEDEIROS DA FONSECA, supra note 37, at 200-45. A. COUSTASSE DEL C. & F. ITURRA A., EL CASO FORTUITO ANTE EL DERECHO CIVIL 120-21 (1958).
- 40. The first Brazilian case to apply the theory of imprevision was Carlos Conteville & Cia. v. Maison F. Elio & Cia.; S.A., 100 Revista de Direito [Rev. Dir.] 178 (1930), aff'd, 77 Revista Forense [Rev. For.] 79 (Sup. Fed. Trib. 1938). See generally A. MEDEIROS DA FONSECA, supra note 37, at 310-20.
- 41. E.g., Santos Filho & Cia. v. Rodrigues Taveres, 151 Revista dos Tribunais [Rev. Trib.] 712, 68 Archivo Judiciário [Arch. Jud.] 344 (5th Cam Civ. Fed. Dis. 1943); Durante v. Teixeira, 166 Rev. Trib. 786, 104 Rev. For. 269 (3d Cam Civ. Ct. App. Fed. Dis. 1945). But see Processo M.T.I.C.N. 231.800-44, 2 Revista de Direito Administrativo [Rev. Dir. Admin.] 812 (Fasc. II 1945).
 - 42. Article 1246 provides:

The architect or builder who contracts to build in accordance with plans accepted by the owner, shall not have the right to demand an increment in the price, even if salaries or materials become more expensive, or there has been an alteration or increase in the amount of work specified in the plans, unless such increment or alteration is done in accordance with written instructions from the owner and exhibited by the architect or builder.

CÓDIGO CIVIL art. 1246 (Braz.) (translation by the author).

43. Constructor Imobliária Comercial S.A. v. Orlando França et al., 36 Revista Trimestral de Jurisprudência [R.T.J.] 104 (3d Term Sup. Fed. Trib. 1965); Beckhauser, et ux v. Pascoa Ceccato, 35 R.T.J. 597 (1st Sup. Fed. Trib. 1965); ECAL v. Araújo Pereira, 4 Revista de Jurisprudência do Tribunal de Justiça do Estado de Guanabara [Rev. Juris. Guan.] 208 (5th Cam. Civ., No. 10, 1964); Banco Americano de Crédito S.A. v. Espólio de Pinto de Macedo, 5 Rev. Juris. Guan. 183 (3d Group Cam. Civ., No. 13, 1965); Auerback v. Coelho Pinto, 210 Rev. For. 145 (5th Cam. Civ. Guan. 1961); Lustman v. da Costa Barros, 41 R.T.J. 725 (1st Term Sup. Fed. Trib. 1967).

claim that inflation was unforeseeable. Only in the area of public construction contracts have the Brazilian courts continued to revise contracts on the theory of imprevision, ⁴⁴ returning to the French administrative law origins of the doctrine. ⁴⁵ But the enactment of federal and state legislation automatically indexing public works contracts has largely obviated any need for judicial revision in this area. ⁴⁶

Early attempts during the 1920s and 1930s to persuade the Argentine courts to accept the theory of imprevision were firmly rebuffed as lacking any support in positive law.⁴⁷ However, after the inflation rate exceeded 30 percent for three consecutive years, as occurred in 1950-1952, Argentine courts began bailing out improvident contractors by reading the theory of imprevision into Argentine law.⁴⁸ This interpretational venture derived wide support from the doctrine.⁴⁹ When the Argentine Civil Code was reformed in 1968, Article 1198 was amended to include the following provision, taken from Article 1467 of the Italian Civil Code:

If, in . . . contracts with deferred or continued performance, the performance of one of the parties becomes excessively onerous because of extraordinary and unforeseeable events, the prejudiced party may demand the termination of the contract. The same principle shall apply to aleatory contracts when excessive onerousness results from causes extraneous to the very risk of a contract.

In contracts of continued performance termination shall not affect that which has already been performed.

Termination shall not be granted if the prejudiced party has been at fault or in delay.

The other party may prevent termination by offering to improve the effects of the contract in an equitable fashion.⁵⁰

^{44.} E.g., Prefeitura Municipal de Santos v. Daniel Domingos & Irmãos, Ltda., 41 R.T.J. 709 (3d Term Sup. Fed. Trib. 1966).

^{45.} The theory of imprevision in France developed in administrative law and has been confined to three types of contracts: (1) public works; (2) governmental supplies; and (3) public utility concessions. A. Von Mehren, The Civil Law System 712 (1st ed. 1957). Attempts to expand the doctrine to contracts governed by the civil law have been regularly frustrated by the Cour de Cassation. 6 Plainol & Ripert, supra note 37, at 532-33; Noirel, L'Influence de la Dépréciation Monétaire dans les Contracts de Droit Privé, in Influence De La Dépréciation Monétaire Sur La Vie Juridique Privée 100-01 (P. Durand ed. 1961).

^{46.} See note 34 supra.

^{47.} Ponzano v. Banco El Hogar Argentino, 29 Jurisprudencia Argentina [J.A.] 576 (App. Rosario 1929); Piran de Flores v. Dose y Cia., 9 Revista Juridica Argentina — La Ley [La Ley] 576 (1st Cam. Civ. B.A. 1937).

^{48.} Grau Bassas v. Fernández, 1952-IV J.A. 381 (2d Cam. Civ. y Com. Eva Perón 1952); Cabal v. Madero, 75 La Ley 254 (CN Civ., sala C 1953). But see Staudt y Cia. v. Padua, 1953-IV J.A. 30 (App. Parana 1953), criticized in a note by Spota, but aff'd, 75 La Ley 411 (Sup. Ct. 1954). For subsequent cases accepting imprevision in the early 1960s, see cases cited at 1 G. Borda, Obligaciones 136 n.312 (4th ed. 1976) [hereinafter cited as G. Borda].

^{49.} The authors are collected in 1 G. BORDA, supra note 48, at 137 n.313.

^{50.} Law 17.711 of April 22, 1968 (Argen.).

Even though the theory of imprevision has been enacted into positive law, in recent years Argentine courts, like their Brazilian counterparts, have been reluctant to utilize this doctrine to relieve contracting parties, taking the position that inflation is a notorious fact of life in Argentina.⁵¹ But the sharp upward surge in the inflation rate between 1974, when the consumer price index rose by only 24.2 percent, and 1975 and 1976, when the index soared by 182.7 percent and 444.3 percent respectively, has led to occasional decisions relieving an obligor because of the imprevisibility of that much inflation.⁵²

Despite the high rates of inflation in Chile and Uruguay, the theory of imprevision does not appear to have been accepted by the courts or legislators.⁵³

There are good reasons for judicial reluctance to embrace the theory of imprevision. At the heart of this doctrine is the notion of unforeseeability. But in countries like Argentina, Brazil, Chile, and Uruguay, inflation is hardly unforeseeable. What is unforeseeable is monetary stability! Thus, the nature of the judicial inquiry really becomes whether the rate of inflation actually experienced substantially exceeded the range of inflation which reasonably might have been contemplated by the parties. This kind of inquiry is doubly difficult because, as Professor Alan Schwartz has astutely observed:

The price reflects the aggregate expectations of market participants, but the litigating parties may have different subjective views as to the expected fluctuation range. This may not be unusual in markets where speculation is frequent, as people apparently speculate because they hold unrepresentative beliefs as to future prices Thus, a court may sometimes have to find two expected price fluctuation curves, not one.⁵⁴

Changes in the prices of commodities and services are typical business risks. A primary purpose of contract law is to permit the parties to fix that risk. There is really no feasible way for the courts to differentiate between price changes resulting from fluctuations in the value of goods and services and those resulting from changes in the value of money, which depends on the quantities of goods and services which one can purchase with it. To revise contracts on the theory of imprevision in a highly inflationary economy a court must make such complex economic judgments that the outcome becomes quite

^{51.} Tomelleri v. Murúa (Cnac. Civ. 11/15/77), J.A., July 5, 1978, at 22; Erifa, S.C.A. v. Waterling, S.R.L. (Cam. Esp. Civ. y Com., sala 5, 6/30/78), La Ley, Sept. 20, 1978, at 5; Chisari, Santos R. v. Vacani, Armando y otros, 1976-II J.A. 3 (Cnac. Civ., sala D, 1975).

^{52.} Aycor S.A. v. Parrone, Atilio y otra, 1977-III J.A. 618 (Cnac. Civ., sala C, 1977) and cases cited in Bianchi, Sobre Inflación e Imprevisión, 1977-III J.A. 619, 620 n.3.

^{53.} Sebastián Bidegáin Sachetti v. Instituto Nacional de Viviendas Económicas, 73 La Justicia Uruguaya [Just. Urug.] 8410 (Trib. Apel. Civ. 1st Sess. 1975) (denying the applicability of imprevision in Uruguayan law). Research has disclosed no Chilean cases accepting the doctrine of imprevision.

^{54.} Schwartz, Sales Law and Inflations, 50 So. CALIF. L. REV. 1, 13 n.30 (1976).

unpredictable. The resulting uncertainty makes economic planning difficult, promotes litigation and seriously undermines the public interest in the security of transactions.

Moreover, to the extent that the courts are willing to intercede readily to relieve contracting parties of hardship created by unanticipated inflation, the parties are relieved of pressure to allocate the risk of inflation on their own. It is far preferable for the parties specifically to allocate the risk of inflation than for the courts at some later date to guess about how the parties would have allocated the risk. As a practical matter, what has happened in these Latin American countries is that almost everyone contracting for future performance either includes some form of protective clause or allocates the inflation risk through the price or the interest rate. This development is described below.

B. The Growth of Consensual Indexation

Over the years lawyers have developed a variety of techniques for protecting the economic value of contracts from inflation. These techniques range in sophistication from simply avoiding contracts which call for future performance for a fixed price to automatic index adjustments with complex mathematical formulae. Though ultimately all stabilization clauses can be regarded as commodity clauses, in that they tie the underlying value of an obligation to the price of a single commodity or a group of commodities, for analytical purposes it is helpful to distinguish among four basic types of stabilization clauses: (1) commodity clauses; (2) gold clauses; (3) foreign money clauses; and (4) index clauses.

1. Commodity Clauses

The simplest technique for insulating an agreement from the operation of the nominalist principle is to use a commodity as both a measure of value and a means of payment. For example, a landowner may rent a field to a farmer in exchange for one-half the crop or for a determined amount of wheat.

Pure commodity clauses have been upheld universally. They are, however, only crude maintenance-of-value devices, for the price of any given commodity may be subject to volatile fluctuations which have nothing to do with the inflation rate. Moreover, contracting parties ordinarily do not wish to be paid in a particular commodity.

Since most people prefer the convenience of being paid in money, the commodity-index clause, a variant on the pure commodity clause, has evolved. The commodity-index clause uses the price of a commodity or group of commodities only as a measure of value; currency is the means of payment. For example, in 1953 Chile authorized the Banco del Estado de Chile to issue readjustable bonds paying up to 6½ percent annual interest with principal in-

dexed to the price of wheat or concrete.⁵⁵ But with the exception of one issue, authorized in 1956 to finance a potable water project and indexed to the price of wheat, this type of bond has not been used.⁵⁶ The difficulty with commodity-indexed bonds is that the purchaser must bear the risk that the price of the commodity to which his bond is linked will lag behind the general price level. The risk is significantly exacerbated in countries like Chile, where price controls have been as familiar a sight on the economic landscape as inflation itself.⁵⁷

Commodity-index stabilization clauses present legal problems similar to index clauses. These problems will be taken up *infra* in the section dealing with index clauses.

2. Gold Clauses

Since people historically have regarded the value of money as the amount of precious metal for which it could be exchanged or which it contained, the most common form of stabilization clause until the 1930s was the gold clause. There are several varieties of gold clauses, but their ultimate purpose are the same: to assure the creditor that he would be no poorer in terms of gold at the time of payment because of any decline in the purchasing power of money.

Since the enactment of legislation making nonconvertible paper money legal tender, gold clauses have been regarded with considerable hostility by courts in many countries. Particularly influential have been French doctrine and case law holding that gold clauses are implicitly invalidated by the principles of nominalism and cours forcé (domestically nonconvertible legal tender). The issue was hotly debated for many years in Argentina, and a number of cases, including a decision of the Supreme Court, declared gold clauses unenforceable because of legal tender legislation. But the more recent cases and doctrine have rejected the French approach, and it now seems reasonably clear that gold clauses are permissible in Argentina. Uruguayan cases and doctrine long maintained that gold clauses were barred by the implication of Law 5150 of August 1914, which expressly prohibits all payments in gold. This line of cases was expressly overturned by a 1976 statute which

^{55.} Chilean D.F.L. No. 357 of July 25, 1953.

^{56.} Moreno, Sistemas Legales de Reajustes en los Valores Monetarios, Revista de Derecho Económico [Rev. Der. Econ.] Jan.-Mar./April-June 1964, at 57, 64.

^{57.} See Furnish, Chilean Antitrust Law, 19 Am. J. COMP. L. 464 (1971).

^{58.} A. NUSSBAUM, supra note 15, at 263-66; F. MANN, supra note 14, at 151-53.

^{59.} Bustillo v. Cafe Paulista, 1953-III J.A. 89, 70 La Ley 399 (Sup. Ct. 1953); see also L. GUR-FINKEL DE WENDY, supra note 27, at 164-71.

^{60.} Bentivoglio v. Arana de Jordán, L.I., 1967-VI J.A. 528, 129 La Ley 799 (Sup. Ct. B.A. 1967); Gaustavino, El Derecho Civil ante la Inflación, 116 La Ley 1080, 1093-94 (1964).

^{61.} D. FERRERE-LAMAISON, supra note 27, at 77-79; 1 J. GAMARRA, TRATADO DE DERECHO CIVIL URUGUAYO 159 (2d ed. 1969).

provides, in pertinent part: "The parties can establish whatever type of stipulation for the purpose of maintaining the value of their contractual obligations." Though the Chilean Supreme Court twice upheld the validity of gold clauses after 1932, when legislation making paper money nonconvertible into gold was enacted, subsequent decisions of that tribunal have declared gold clauses unenforceable because of such legislation. Following the example of the United States, Brazil in 1933 adopted a decree abrogating all gold clauses; however, unlike the United States, the Brazilians have not seen fit to repeal this legislation.

International monetary events have made gold clauses anachronisms. To-day no currency is freely convertible into gold. Any theoretical linkage between the world's currencies and gold was formally abolished by the Second Amendment to the International Monetary Fund's Articles, which went into effect in 1978. Except for dentists, jewelers, or industrial users of gold, it no longer makes sense to attempt to maintain the real value of a contractual obligation by inserting a gold clause. Even prior to demonetization, gold had become a highly speculative commodity. Today its price fluctuates widely on international commodity markets for reasons which often are not related directly to the real purchasing power of national currency units.

3. Foreign Currency Clauses

Another common stabilization device is the foreign currency clause. The foreign currency, which is generally a so-called "hard currency" (relatively stable), may serve as the unit of payment or solely as the unit of account. For example, an Argentine lease might require payment of a monthly rent of U.S. \$1,000. Alternatively, the rental might be fixed at U.S. \$1,000 per month, payable in Argentine pesos at the official exchange rate in effect on the first day of each month.

^{62.} Law No. 14.500 of Feb. 25, 1976, art. 9 (Uruguay).

^{63.} Mujica v. Vergara, 35 Revista de Derecho, Jurisprudencia y Ciencias Sociales y Gaceta de los Tribunales [R.D.J.] 318 (2d Part, 1st Sec. 1938); Dirección General de Impuestos Internos v. Corte, 36 R.D.J. 426 (2d Part, 1st Sec. 1939).

^{64.} Compānia Chilena de Electricidad v. Ferrocarriles del Estado, 46 R.D.J. 917 (2d Part, 1st Sec. 1949); Fisco v. Compānia de Teléfonos de Chile, 45 R.D.J. 644 (2d Part, 1st Sec. 1948); see also Varela Varela, Discurso, in EL DERECHO ANTE LA INFLACION 25, 29 (Primer Congreso Nacional de Abogados Chilenos, 1954); Lira Urquieta, El Gódigo Civil y la Inflación, in EL DERECHO ANTE LA INFLACIÓN 152, 155 (Primer Congreso Nacional de Abogados Chilenos, 1954). Presently, gold clauses would seem to be banned by Decree-Law No. 455 of May 25, 1974, arts. 17, 19 (Chile), with respect to credit transactions, unless special permission is obtained from the Central Bank.

^{65.} Decree No. 23.501 of Nov. 27, 1933 (Braz.)

^{66.} Pub. L. No. 95-147, § 4(c), 91 Stat. 1299 (1977), repealing the U.S. Joint Resolution with respect to obligations issued on or after October 28, 1977.

^{67.} See INT'L MONETARY FUND, ANNUAL REPORT 56 (1978).

Argentina and Chile have permitted the use of foreign currency clauses. The case law has insisted, however, that except for international transactions, the foreign currency serve only as a unit of account; the unit of payment must be national currency. Until 1976 Uruguayan courts regularly nullified foreign currency clauses in domestic contracts as incompatible with the legal tender legislation. This line of cases was legislatively overruled in 1976 by Law No. 14.500, which expressly permits foreign currency clauses regardless of whether the foreign currency is the unit of account or the unit of payment. Brazilian law, on the other hand, continues to regard as null and void all foreign currency clauses except for: (a) import or export contracts; (b) financing agreements for the export of Brazilian goods; (c) contracts for the buying and selling of foreign exchange; and (d) contracts where the debtor and the creditor are neither Brazilian citizens or domiciliaries, unless the contract involves the lease of real property situated in Brazil.

Foreign currency clauses are useful techniques for shifting exchange risks in international transactions, but they are far from ideal devices for protecting parties from the risks of inflation in domestic contracts. Though the dollar may appear to be stable to a landlord in Argentina, whose peso has declined enormously vis-a-vis the dollar in the last six years, the purchasing power of the dollar has itself declined by approximately 50 percent between 1971 and 1977. The foreign currency clause offers no protection against inflation in the so-called "hard currency." Moreover, in the short-run at least, countries undergoing severe inflation often delay devaluation or devalue by far less than inflation rate differentials would suggest as proper. When this happens, as it commonly does in Latin America, creditors who rely on foreign currency

^{68.} Atlas S.A. v. Valentine, 105 La Ley 691 (CN Com., Sala C, Arg. 1961); Schwarz v. Cortazar, 60 R.D.J. 169 (2d Part, 2d Sec., C. Santiago, Chile 1963).

^{69.} The cases are collected and criticized in Capurro Calamet, Algo Más sobre la Pretendida Vigencia del Curso Forzoso y el Problema de la Eficacia Juridica de las Obligaciones Internas Pactadas en Moneda Extranera, 64 Revista de Derecho, Jurisprudencia y Administración [Rev. D.J.A.] 1 (1967); see also Caggiani, Alcone y Validez des las Cláusulas Monetarias según Nuestro Derecho Positivo, 64 Rev. D.J.A. 26 (1967); Quijano, La Cláusula Oro o en Moneda Extranjera frente a la Ley del 18 de Ereno de 1938, Revista de la Facultad de Ciencias Economicas y Administración [Rev. Fac. Ciencias Econ. y. Admin.] 316 (No. 2, 1940).

Foreign currency loans, however, were expressly permitted by statute for loans made through the Central Bank with the proceeds of foreign borrowing for economic development purposes. D. FERRERE-LAMAISON, supra note 27, at 96-100.

^{70.} Law No. 14.500 of Feb. 25, 1976, art. 10 (Uruguay). However, the Uruguayan courts have refused to apply Law No. 14.500 retroactively. E.S.A. v. A.B., 76 Just. Urug. 8719 (Trib. Appl. Civ., 1st Sess. 1977).

^{71.} Decree Law No. 23.501 of Nov. 27, 1933 (Braz.), as amended by Law No. 28 of Feb. 15, 1935 (Braz.); Decree No. 6.650 of June 29, 1944 (Braz.); and Decree-Law No. 857 of Sept. 11, 1969 (Braz.).

^{72.} See generally G. HALM, MONETARY THEORY 221-28 (1946). Brazil has frequently maintained an overvalued exchange rate. See Cline, Brazil's Emerging International Economic Role, in Brazil in the Seventies 63, 68-70 (R. Roett ed. 1976).

clauses for protection are bound to be at least partially disappointed. Finally, they create problems of interpretation when, as occasionally happens in Latin America, multiple exchange rates are in effect.

4. Index Clauses

The most effective way for contracting parties to protect themselves against inflation is by linking the value of their bargain to a broadly-based price index, such as the consumer price index, wholesale price index, or implicit GNP deflator.⁷³ Because such indexes are yardsticks of the purchasing power of national currency, they are tailored far better to inflation-proofing contracts than commodity, gold, or foreign currency clauses. A number of courts and commentators also have voiced hostility to permitting the use of index clauses. The legal reasons advanced for striking down index clauses generally are perceived conflicts with legal tender legislation, the nominalist principle, or public policy.⁷⁴ But the underlying reasons would appear to be the fear that index clauses exacerbate inflationary pressures, impose inequitable burdens on certain debtors, and unfairly allow a few privileged persons to escape the implicit tax levied upon society through the mechanism of inflation.⁷⁵ Despite their present popularity in these Latin American countries, index clauses have had to overcome a number of juridical obstacles.

Brazilians have had to contend with doctrine and case law invalidating index clauses because of the broad language used in the gold clause legislation. Decree No. 23.501 of November 27, 1933, which is still in force, not only abrogates all gold clauses, but goes on to nullify every contract to be performed in Brazil "that stipulates payment in money other than by its current legal value." This ambiguous language caused some Brazilian jurists to declare that index clauses were forbidden unless specifically authorized by the legislature. Because of lingering doubts about the validity of index clauses,

^{73.} Rosenn, Protecting Contracts from Inflation, 33 Bus. Law. 729 (1978). A brief, readable explanation of the construction and qualities of these indexes is contained in W. WALLACE, MEASURING PRICE CHANGES: A STUDY OF THE PRICE INDEXES (2d ed. 1972).

^{74.} The source of much of this doctrinal absurdity has been France. The literature describing the doctrinal knots in which the French have tied themselves on this issue is immense. Useful treatments in English are Lévy, "Sliding Scale" or "Indexation" Clauses in French Law, 16 Am. U. L. REV. 35 (1966) [hereinafter cited as Lévy]; Hauser, The Use of Index Clauses in Private Loans, 7 Am. J. COMP. L. 350 (1958); Vasseur, French Monetary Depreciation and Methods Used to Remedy It, 30 Tul. L. REV. 73 (1955) [hereinafter cited as Vasseur].

^{75.} See Vassuer, supra note 74; see also, Lévy, supra note 74, at 38-49 for a description of the variety of legal arguments and counterarguments articulated in French doctrine and cases.

^{76.} See note 65 supra.

^{77.} E.g., Caio Mario da Silva Pereira, Establecimento de Cláusula de Escala Móvel nas Obrigações em Dinheiro, 234 Rev. Trib. 3, 157 Rev. For. 50 (1955); San Tiago Dantas, cited in A. WALD, supra note 16, at 160-61; Draft Code of Obligations of 1965, art. 144.

the military government which came to power in Brazil in 1964 felt it necessary to enact numerous statutes specifically authorizing the use of indexation in certain types of transactions and under certain conditions. Since there has never been an across-the-board authorization of indexation in all contracts, Brazilians long have harbored doubts about the legality of index clauses not specifically authorized by statute. In recent years, however, the case law has taken the position that all index clauses are valid unless they conflict with a specific legislative norm.

Though French doctrine and case law with respect to nominalism and cours force initially generated some doubts, the Argentines, Chileans, and Uruguayans long have regarded index clauses as valid and have employed them widely.⁸⁰

Another legal hurdle for index clauses has been usury laws. If the adjustment resulting from indexation is considered interest rather than return of principal, index clauses in loans are likely to be deemed usurious even with relatively mild rates of inflation. Since the nominalist principle conclusively presumes that money is always equal to itself, courts accustomed to thinking in nominalist terms are prone to consider sums from indexation as interest.⁸¹ Even in countries like Brazil and Chile, where indexation is widespread, the courts occasionally have allowed usury statutes to trap the unwary. Though in 1966 the Chilean Supreme Court reversed the criminal conviction for usury of a defendant who had indexed the balance due on the sale of an apartment to the price of wheat,⁸² in 1970 the Court of Appeals for Santiago astonishingly upheld the usury conviction of a moneylender whose loans, which carried a nonusurious nominal interest rate, were indexed to the official cost-of-living index.⁸³ In Brazil, whether the usury laws are violated has become essentially a matter of how one labels the transaction. So long as one is careful to use the

^{78.} This legislation is described in J. CHACEL, et al., supra note 27; and INDEXATION, THE BRAZILIAN EXPERIENCE (M. Nadiri & A. Pastore eds., Occasional Papers of the Nat'l Bureau of Econ. Research, Vol. 4, No. 1, Winter 1977).

^{79.} J. CHACEL, et al., supra note 27, at 58-59. One example of such a norm is Law No. 5.411 of May 24, 1968 (Braz.), restricting increments in residential rentals from index clauses to a maximum of two-thirds of the percentage increase in the minimum wage.

^{80.} For Argentina, see F. TRIGO REPRESAS, OBLIGACIONES DE DINERO Y DEPRECIACION MONETARIA 211 (1965); for Chile, see Vargas Vargas, Notas para un Estudio de la Cláusula de Variación según Índices en el Contrato de Mutuo, in EL DERECHO ANTE LA INFLACION 159 (Primer Congreso Nacional de Abogados Chilenos, 1954); for Uruguay, see D. FERRERE-LAMAISON, supra note 27, at 110.

^{81.} Two recent examples in the United States are Aztec Properties v. Union Planters Nat'l Bank, 530 S.W. 2d 756 (Tenn. 1975), cert. denied, 425 U.S. 975 (1976); and Olwine v. Torrens, 236 Pa. Super. 51, 344 A.2d 665 (1975).

^{82.} Salas v. Miguel, 63 R.D.J. 141 (2d Part, 4th Sec. 1966). This case is discussed in Fueyo Laneri, La Actualización o Reajustabilidad del Valor de la Deuda Dinerária, como Requisito del Pago Efectivo, Cualquiera Que Sea la Fuente de la Obligación, Rev. de Ciencias Penales 3, 11-12 (1974), translated in K. KARST & K. ROSENN, LAW AND DEVELOPMENT IN LATIN AMERICA 454 (1975).

^{83.} Wagemann Ehrenfeld, Julio, 67 R.D.J. 42 (2d Part, 4th Sec. 1970).

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term monetary correction or commission rather than interest to denominate payments for the use of money, Brazilian courts are willing to tolerate the circumvention of the usury laws.⁸⁴ Indeed, it is common for lenders to denominate sums as "prefixed monetary correction" to circumvent the usury laws.⁸⁵ But if a lender is naive enough to call the additional sums interest, the Brazilian courts have tended to enforce the 12 percent a year usury limitation in purely nominalist terms.⁸⁶ Chile has obviated this usury problem by defining interest in valoristic terms. A 1974 statute specifically provides that nominal increases in loan payments because of increases in the consumer price index are not interest for any legal purpose.⁸⁷

Though index clauses now are permitted in all four of these South American countries, Brazil and Chile recently have imposed certain restrictions on their use. Concern about the inflationary feedback from its comprehensive system of monetary correction led Brazil to enact a law in 1977 which limits indexation of virtually all pecuniary obligations to the type of readjustment calculated by the government for Readjustable Treasury Bonds.⁸⁸ Though readjustment of these bonds is supposed to be based upon variations in the wholesale price index, in recent years the government has expurgated and manipulated the adjustment mechanism so that the rate of increase in these bonds has been several percentage points below that of the wholesale price index.⁸⁹ In 1974 Chile enacted a statute that is Janus-faced with respect to indexation.⁹⁰ First, it repeals Article 2199 of the Chilean Civil Code, which had explicitly adopted nominalism but had expressly permitted index clauses.⁹¹ Sec-

^{84.} B. Prates & Cia. Ltda. v. Toyota do Brasil S.A., R.E. No. 64.473, 53 R.T.J. 21 (Sup. Trib. Fed. en banc 1969); Wald, Da Correção Monetária dos Debitos Comerciais na Jurisprudência, Revista dos Tribunais Informa [RT Informa], Jan. 30, 1971, at 17.

^{85.} Rosenn, Adaptions of the Brazilian Income Tax to Inflation, 21 STAN. L. REV. 58, 96 (1968). The total interest and estimated monetary correction are fixed in advance, but no attempt is made to separate interest from monetary correction until the official calculation of the Readjustable Treasury Bonds is made. At the time any amount in excess of the officially recognized amount of monetary correction is denominated interest and the rest is considered tax-exempt and usury-exempt monetary correction.

^{86.} Figueiredo v. Gutierre, R.E. No. 58.414, 36 R.T. J. 46 (Sup. Fed. Trib., 1st Term, 1965); Albino da Cruz Ferro, R.E. No. 65.424, 47 R.T.J. 558 (Sup. Fed. Trib., 1st Term 1968).

^{87.} Decree-Law No. 455 of May 25, 1974, art. 4 (Chile).

^{88.} Law No. 6.423 of June 17, 1977 (Braz.). This statute excepts only contracts for the future delivery of goods or services and certain contracts already in force.

^{89.} Between 1974 and 1976 the value of Readjustable Treasury Bonds increased by 30.1 percent, while the wholesale price index increased by 41.3 percent. During the first quarter of 1977 Readjustable Treasury Bonds increased by 6.1 percent, while the wholesale price increased by 13.4 percent. Calculated from data appearing in Conj. Econ., May 1977, at 153, 169. The evolution of the formula for the calculation of monetary correction for Readjustable Treasury Bonds is shown in Correção Monetária e Realimentação Inflacionária, Conj. Econ., June 1976, at 88, 92-94; and Correção Monetária das O.R. T.N.-Formas de Cálculo, Conj. Econ., Dec. 1974, at 92; see also note 29, subra.

^{90.} Decree-Law No. 455 of May 25, 1974 (Chile).

^{91.} Id., art. 25.

ond, it prohibits indexation of all credit transactions with a term of one year or less, forcing the creditor to rely solely on the interest rate to protect himself against inflation. Third, it frees interest rates from nominalist usury constraints by defining interest so as to exclude any sums resulting from indexation, at least to the extent of the variation in the official consumer price index. 92 Fourth, the law automatically indexes all credit transactions in Chilean currency with a term of more than one year to the consumer price index unless the parties expressly stipulate to the contrary or secure Central Bank permission to use an alternative index. 93 Fifth, it modifies the Commercial Code to permit negotiable instruments to contain index clauses. 94

Indexation has become a vital mechanism in restoring the medium and long-term credit markets, which had largely disappeared in these countries because of inflation. In Argentina and Brazil indexed government securities have become very important financial instruments.⁹⁵ However, there has not been a corresponding development in private corporate offerings of indexed securities.⁹⁶ In all of these countries, there are extensive systems of indexed savings deposits and correspondingly indexed mortgages.⁹⁷

It would be a mistake, however, to assume that all credit transactions are indexed. Many businessmen are unhappy about not knowing what their actual cost of credit will be in advance. In all of these countries there are large numbers of credit transactions, generally short-term, that remain unindexed, or employ what the Brazilians call "prefixed monetary correction."

IV. DAMAGES FOR BREACH OF OBLIGATIONS

Chronic inflation can play havoc with damages awarded by courts for breach of contract or torts. The nominalist principle, fixed legal interest rates, and currency depreciation — operating in tandem — can effectively thwart

^{92.} Id., art. 4.

^{93.} Id., art. 19.

^{94.} Id., arts. 26, 27.

^{95.} See G. Jud, supra note 28, at 104-07; Roe, Indexation of Government Bonds in Brazil: Reflections on the Relationship between Fixed Rules and Financial Development, 12 VAND. J. TRANSNAT'L L. — (1979).

^{96.} Ness, Financial Markets Innovation as a Development Strategy: Initial Results from the Brazilian Experience, 22 ECON. DEV. & CULT. CHANGE 453, 458 (1974).

^{97.} The Brazilian system is described in Lefcoe, Monetary Correction and Mortgage Lending in Brazil: Observations for the United States, 21 STAN. L. REV. 106 (1968); Reynolds & Carpenter, Housing Finance in Brazil: Towards a New Distribution of Wealth, in 5 LATIN AM. URB. RESEARCH 147 (W. Cornelius & F. Trueblood eds. 1975). The Chilean program is described in Burke, Law and Development: The Chilean Housing Program, 2 LAW. AMERICAS 173, 353 (1970); G. JUD, supra note 28, at 88-90. Though legislation authorizing readjustable savings deposits and mortgages was enacted in Argentina during the 1960s, the system only recently has become widely used. See Resolution No. 21 of the Caja Federal de Ahorro y Prestamo para la Vivienda of Dec. 30, 1975; G. JUD, supra note 28, at 106-07. Uruguay has had an indexed deposit and mortgage system since 1969. See Robinson, Readjustable Mortgages in an Inflationary Economy — A Study of the Israeli Experience, 5 J. INT'L L. & ECON. 169, 182 (1971); D. FERRERE-LAMAISON, supra note 27, at 110-13. 98. See note 85 supra.

the basic purpose of compensation, restoration of the status quo ante to the extent monetarily possible.

Inflation erodes the value of monetary damages in several ways. Where damages are liquidated or calculated as of the date of breach or the tort, inflation between that date and the date of judgment will substantially reduce the value of the award, unless interest is awarded at a rate which exceeds inflation. If there is a significant lapse of time between judgment and payment, inflation will further erode the real value of the compensation awarded. This gives the defendant an enormous economic incentive to delay the proceedings as much as possible. The problem of inflationary erosion is even more pronounced with respect to damages for future injuries, such as lost earnings or profits. To the extent that courts fix such sums in terms of present values, inflation will quickly render the award inadequate. This is particularly striking in countries like Brazil and Chile, which compensate tort victims for lost future earnings with a pension instead of a lump sum award.

Consider the facts of the Chilean case of Guzmán v. Empresa de los Ferrocarriles del Estado. 99 In 1959 Sra. Guzmán attempted to secure judicial revision of her monthly pension of 500 pesos, awarded in 1942 for life or until remarriage, to indemnify her for the wrongful death of her husband. Her pension was based upon her deceased husband's earnings in 1934, the date he was killed in a train accident. By 1942, when she finally began receiving her pension, inflation already reduced its purchasing power by more than half. By 1959 her pension had lost 99.4 percent of its 1934 value. Though he could find no legal basis to revise this widow's pittance, the trial judge increased it anyway, citing general considerations of equity. However, the Court of Appeals reversed on the grounds that the judgment violated the principle of res judicata, and the Chilean Supreme Court sustained the decision of the Court of Appeals. 100

A. The Award of Indexed Pensions

Brazil has resolved the inequities inherent in the Guzmán situation by awarding indexed pensions. During the late 1950s and early 1960s, as inflation began to gallop, Brazilian courts began to index pensions in accident cases to the prevailing minimum wage. The problem was particularly acute in Brazil because procedural law required the indemnity for lost earning capacity be in the form of a pension. Despite initial hostility to this innovation, after 1963 the Supreme Federal Tribunal, Brazil's highest court, began confirming indexed awards. 101 By 1969 the Supreme Federal Tribunal's decisions had

^{99. 60} R.D.J. 407 (2d Part, 1st Sec. 1963).

^{100. 60} R.D.J. at 418-19.

^{101.} E.g., de Oliveira v. Rio Light S.A., R.E. No. 57.505, 45 R.T.J. 115 (2d Term 1967); Silva Ramos v. Rêde Ferroviária Federal S.A., 45 R.T.J. 421 (1st Term 1968). The case law evolution is traced in considerable detail in J. CHACEL, et al., supra note 27, at 188-206.

become sufficiently uniform on the subject for the court to promulgate the following Súmula, or case law rule: "The pension corresponding to compensation for civil responsibility must be calculated on the basis of the minimum wage prevailing at the time of the judgment and shall be adjusted for subsequent variations." In most cases Brazilian courts require the tortfeasor to purchase and deposit with the court government bonds with a yield sufficient to fund the pension. The introduction of Readjustable Treasury Bonds in 1964 has made it possible for the Brazilian courts to fund indexed pensions for accident victims with correspondingly indexed securities. 104

B. Debts of Value

An important doctrinal technique for shifting the onus of monetary depreciation to the tortfeasor or one who breaches another type of obligation has been to differentiate between debts of value (Wertschuld, divida do valor, deuda de valor) and pecuniary debts. A debt of value, sometimes called an adaptable debt, 105 requires the obligor to pay an economic value rather than a fixed pecuniary sum. Child support and alimony are classic examples: if the needs of the child or spouse change, or the purchasing power of the currency declines, the support obligation may be revalued. In theory one distinguishes between debts of value and pecuniary debts by determining whether the object of the obligation is the payment of an essentially non-pecuniary value or the payment of a sum of money. If the obligation's object is the former, the debt is one of value and, by definition, readjustable for inflation. However, there is no conceptual conformity. The writers and cases diverge considerably, both as to which kinds of obligations should be characterized as debts of value, and as to whether a debt of value becomes a pecuniary debt as soon as it is liquidated (in a sense of being valued in currency), or remains a debt of value until judgment, or actual payment. 106 The debt of value is essentially a doctrinal device

^{102.} Sumula No. 490 of Dec. 3, 1969, published in Diario da Justiça da União Federal, Dec. 10, 1969, at 5.931 (translation by the author).

^{103.} CÓDGIO DE PROCESSO CIVIL DE 1939, arts. 911, 912 (Braz.) as amended by Decree-Law No. 4.565 of Aug. 11, 1942 (Braz.); CÓDIGO DE PROCESSO CIVIL DE 1973, art. 602 (Braz.).

^{104.} E.g., Viação Nove de Julho Ltda. v. Cromopel-Comércio e Indústria de Papel e Papelão S/A, A.C. No. 169.923, 395 Rev. Trib. 183, 186 (1st Civ. Cam. S.P. 1968). Law No. 6.205 of April 29, 1975 (Braz.), prohibits the use of the minimum wage for monetary correction "for any legal purposes whatsoever," except for wage, social security, and fringe benefit adjustments. Adjustments for other purposes should be made on the basis of changes in the value of Readjustable Treasury Bonds. See Law No. 6.423 of June 17, 1977 (Braz.).

^{105.} The term Wertschuld was invented in 1925 by Arthur Nussbaum to differentiate between pecuniary and value obligations. Because he felt the term "value-debt" was obscure in English, Professor Nussbaum decided to translate Wertschuld as "adaptable debt." A. NUSSBAUM, supra note 14, at 180 n.45. Debt of value seems clearer than adaptable debt, and the text proceeds on that basis.

^{106.} As Professor Gomes has so accurately stated:

for placing the risk of monetary depreciation on the obligor when it appears just to do so. During times of severe inflation there is a natural tendency on the part of doctrinal writers and lawyers to attempt to expand the scope of debts of value. Though there is little dispute among jurists who recognize the concept that tort and contract damages are debts of value, there is little agreement as to whether such damages become pecuniary debts once liquidated.

Severe inflation and the influence of European doctrine and case law recently have led the courts of Argentina and Brazil to accept the doctrine of the debt of value and to shift the time for calculating damages from the date of the accident or breach of contract to the date of the judgment. The Chilean courts also have changed their orientation in the past decade to permit monetary correction of a damage award to compensate for monetary depreciation between the date of the accident and the date of payment of the judgment. Uruguayan lower courts and doctrinal writers have accepted the concept of the debt of value; 109 however, the Supreme Court has thus far sand-bagged this breach in the dam of nominalism.

The effect of the debt of value characterization is to place the onus of monetary depreciation on the tortfeasor or the party in default on a contractual obligation up to the moment of actual payment. If there is monetary depreciation between the date of judgment and actual payment, such as when

There is no conceptual uniformity; the notion varies according to the exigencies of the monetary picture and . . . in accordance with the criteria which the writers prefer. . . . [T]he preferable notion is that which characterizes [debts of value] as obligations whose object does not originally constitute a nominal sum, but depends upon the circumstances or future elements, variable and exogenous to the juridical relationship. However, they do not constitute a homogeneous category. Mugel has separated them into three groups: (1) credits of reparation; (2) credits of reimbursement; and (3) credits of unjust enrichment.

O. GOMES, TRANSFORMAÇÕES GERAIS DO DIREITO DAS OBRIGAÇÕES 112-13 (1967).

107. For the evolution of Argentine case law and doctrine, see E. BANCHIO, OBLIGACIONES DE VALOR 133-38 (1965) [hereinafter cited as E. BANCHIO]; for a resumé of current Brazilian case law, see Wald, À Inflação e as Indenizações, 233 Rev. For. 21 (1971).

108. Cohen, Mario César, 66 R.D.J. 203 (2d Part, 4th Sec. 1969); Lama, Abraham, 67 R.D.J. 424 (2d Part, 4th Sec., Sup. Ct., Oct 16, 1970), Escobar, Angelica, 71 R.D.J. 278 (2d Part, 4th Sec., Sup. Ct., Oct. 8, 1974).

109. J.A. v. Camara del Bien Raiz, 67 Just. Urug. No. 7907 (Juzgado Letrado del Trabajo de 2d Turmo, Feb. 1, 1973); Galván Freijo de Reyes v. Dominguez, 66 Just. Urug. No. 7890 (1st Instance, Aug. 26, 1971); E.F.M. v. B.F.S., 67 Just. Urug. No. 8036 (1st Instance, Apr. 24, 1973); Carnelli, La Desvalorización Monetaria en la Reparación del Daño Extracontractual, 68 Rev. D.J.A. 276 (1969) and cases cited therein.

110. Onda S.A. v. CUTCSA, 69 Just. Urug. 8171 (Sup. Ct., June 5, 1974). However, to the extent that the tort claim is liquidated, Law No. 14.500 of Feb. 25, 1976 (Uruguay), now provides for readjustment in accordance with the variations in the consumer price index between the date of the tort and the date of payment. But the Uruguayan Supreme Court has refused to apply this statute retroactively, tenaciously adhering to nominalist theory. Ferrari, Britos et al. v. Frigorifico Modelo S.A., 75 Just. Urug. No. 8623 (Sup. Ct., May 13, 1977).

an appeal is taken, the amount of the obligation will be revalued to reflect the interim diminution in value. 111

Though it has considerable utility in securing relief from the nominalist principle during periods of inflation, the debt of value concept breaks down in two important areas: (1) pecuniary obligations; and (2) nonliquidated damages which are converted into pecuniary obligations by virtue of their payment by the plaintiff. These problems are discussed in the next section.

C. Pecuniary Obligations

The doctrine of the debt of value is no help to the creditor who sues for damages arising from failure to repay a debt on time. In this situation, the obligation is plainly pecuniary, and Civil Code provisions typically restrict the creditor's remedy to legal interest. But legal interest, which in a country like Brazil is set at 6 percent a year, is often decidedly negative in an inflationary economy. Invocation of the nominalist principle prevents the creditor from recovering for monetary depreciation, because such damage is presumed to be nonexistent. It makes sense to impose the risk of monetary depreciation on the creditor during the term of the loan, for it is fair to assume that he allowed for that risk in determining the interest rate, or could have protected himself against that risk by use of a stabilization clause. But it makes little sense to assume that the creditor also assumed the risk of monetary depreciation beyond the date set for repayment, 112 even though it is customary for commercial lenders to factor in the risk of default.

A similar problem arises with respect to the nondefaulting party who has to cover by purchasing goods in the open market, or the tort victim who repairs his car prior to suing for damages. It is hard to characterize what they are owed as nonpecuniary obligations, though some courts have stretched the elastic of the debt of value concept to include them. Application of the nominalist principle to place the burden of monetary depreciation on these involuntary creditors makes no sense at all, for they clearly never assumed the risk of monetary depreciation and never had a chance to protect themselves against it. The onus appropriately belongs on the tortfeasor or the defaultor,

^{111.} Starting from the proposition that damage awards are debts of value, Argentine doctrine and case law, albeit less than unanimously, holds that a damage award does not lose its character as a debt of value until the moment of payment. E. BANCHIO, supra note 107, at 129-49. In Brazil and Chile, where the courts have been influenced by a great deal of legislation mandating monetary correction, damage awards are being monetarily corrected in accordance with variations in price indexes or the minimum wage between the date of judgment and the date of actual payment. Brazilian cases are collected in J. CHACEL, et al., supra note 27, at 176-213; Wald, Paracer, 258 Rev. For. 191, 196-202 (1977). The Chilean cases are collected in Gesche Müller, supra note 27.

^{112.} Hauser, Breach of Contracts during Inflation, 33 Tul. L. Rev. 307, 308 (1959).

^{113.} For a time, Argentine case law was badly divided on this precise question. The cases are collected in Malvar, Deudas de Valor y de Dinero. La Desvalorización Monetaria y el Proceso, Oportunidad para Alegarla, 1968-VI J.A. 138-39.

who otherwise profits from being able to pay off his obligation in depreciated currency.

Uruguay resolved this problem by statute in 1976.¹¹⁴ Since the Uruguayan Supreme Court has refused to recognize the concept of the debt of value to readjust damages for inflation, the legislature has provided that monetary depreciation shall be taken into account in liquidating the value of all pecuniary obligations whose performance is the subject of a lawsuit or arbitral proceeding. This is to be calculated by multiplying the amount of the obligation on the date it arises by the percentage increase in the consumer price index between that date and the date the obligation is actually paid. Interest also is calculated on the readjusted value.¹¹⁵

Spurred by the hyperinflation of 1975 and 1976 and a strong doctrinal current, ¹¹⁶ the Argentine courts recently have jettisoned nominalism on their own and permitted recovery for monetary depreciation when there has been delay in the payment of pecuniary obligations. ¹¹⁷ In reaching this result, the Argentine courts and commentators have relied on a suggestive note by Vélez Sársfield, the drafter of the Civil Code, that had he been contemplating monetary depreciation (which he was not), he would have chosen the solution of the Austrian rather than the French Civil Code. ¹¹⁸ Initially, some of the commercial courts excluded overdue negotiable instruments and other commercial paper from judicially imposed indexation because of a desire to maintain the notion that the value of the instrument be ascertainable on its face. ¹¹⁹

^{114.} Law No. 14.500 of Feb. 25, 1976 (Uruguay).

^{115.} Id., art. 4.

^{116.} E.g., Lopez Cabana, La "Indexación" de las Deudas Dinerarias, 1976-III J.A. 788; Bustamante Alsina, Deudas de Dinero y Deudas de Valor. Alcance de la Distinción y Posibilidad de Suprimirla, 149 La Ley 952 (1973); Darió, Incumplimiento de una Obligación Dineraria y Depreciación Monetaria, 29 J.A. 799 (1975); Borda, Las Deudas de Dinero y la Desvalorización Monetaria, La Ley 1975-C-793; Carranza, Las Deudas Dinerarias frente a la Desvalorización de la Moneda, J.A. Doctrina 186 (1974).

^{117.} Vieytes de Fernández v. Provincia de Buenos Aires, 1976-IV J.A. 367, La Ley 1976-D-241, (Sup. Ct., Sept. 23, 1976); Valdez v. Gobierno Nacional, La Ley 1976-D-248 (Sup. Ct., Sept. 23, 1976); Maturana v. Elma, La Ley 1977-C-533 (CN Fed., Apr. 22, 1977); La Amistad S.R.L. v. Iriarte, 1977-IV J.A. 3, La Ley 1977-D-1 (CN Com., en banc Sept. 19, 1977); CN Com, en banc April 13, 1977, in La Ley, Apr. 22, 1977, at 1.

^{118.} See note 22 supra. The Austrian Code provision referred to by Vélez Sársfield is Article 988 of the Civil Code, which provides:

Legal currency changes, without alteration of the internal value, are at the risk of the creditor. He shall accept payment in the fixed sort of coin given by him, for example, 1000 imperial ducats or 3000 twenty kreuzer-pieces, without regard to whether or not their external value has been increased or diminished in the meantime. However, if the internal value has been altered, the payment is to be effected in proportion to the internal value which the said sort of coin had at the time the loan was contracted.

Translated by P. BAECK, THE GENERAL CIVIL CODE OF AUSTRIA 191-92 (1972).

^{119.} Chiarmonte, La Depreciación Monetaria en los Títulos de Crédito y en el Proceso Ejecutivo, La Ley 1978-A-267.

But a very recent en banc decision has abandoned this distinction and has required indexation of all unpaid pecuniary obligations. 120

Although the question is not free from doubt, Chile would appear also to have rejected the nominalism of its Civil Code and to permit recovery for monetary depreciation for delay in the payment of pecuniary obligations.¹²¹ The Brazilian courts, on the other hand, generally have adhered to nominalism with respect to pecuniary obligations,¹²² though there are very recent indications that this orientation may be changing.¹²³

V. Conclusion

Chronic inflation has forced Argentina, Brazil, Chile, and Uruguay to abandon nominalism and embrace valorism in a number of crucial areas of their legal systems. In Argentina and Brazil, and to a lesser extent Chile, the courts have played a leading role in adapting legal institutions to inflation to

^{120.} Papelera Alsina S.A. v. Arnedo, José A., La Ley 1978-A-267 (CN Com, en banc, Dec. 22, 1977).

^{121.} There have been few reported Chilean cases dealing with this problem. In Enrique Pérez Moscoso v. Pablo Valdés Ossa, 62 R.D.J. 9 (2d Part, 3d Sec., Sup. Ct., April 2, 1965), the Labor Court of Santiago monetarily corrected the damages owed an employee for breach of a labor contract because the unpaid salary had an alimentary character, a result confirmed by the Supreme Court in denying an appeal. The opposite result was reached in an unpublished decision of the Court of Appeals of Concepción of April 15, 1974, which relied upon the nominalist theory of the Civil Code to reject a request for readjustment of a sum owed because of breach of a service contract. Cited in Alvarez Nuñez, Las Obligaciones de Dinero en el Código Civil, 41 Rev. Der. 43, 51 n.8 (Jan.-June 1974). In Blanco v. Carvacho, 72 R.D.J. 49 (2d Part, 1st Sec., Sup. Ct., May 20, 1975), the Supreme Court required monetarily corrected restitution of the portion of the purchase price already paid upon annulment of a sales contract. The Court considered adherence to the nominalist principle tenable only when there is an express legal provision requiring payment or repayment in an equal number of currency units, such as CÓDIGO CIVIL art. 2199 (Chile). Article 2199 which is generally considered to be the source of the nominalist principle in the Chilean Civil Code, has been explicitly revoked by Decree-Law No. 455 of May 25, 1974 (Chile). Recent doctrinal writing has taken the position that damages stemming from monetary depreciation after breach of contract are compensable under Chilean law. Alvarez Nuñez, supra; Gesche Müller, supra note 27, at 7; Santa Maria, Indemnizaciones de Perjuicios y Desvalorización de la Moneda, 67 R.D.J. 149 (1st Part. No. 8, 1970).

^{122.} Gerlado Vieira Gonzaga da Silva v. Regina Maria Gonzaga Rammelt et al., 7 Jurisprudência Brasileira [Juris. Bras.], Correção Monetária 217 (TJRJ 4/22/76); Associação dos Servidores Civis do Brasil v. Marilla Ruth Martins Guerra, 7 Juris. Bras., Correção Monetária 259 (TJRS 8/5/75); Jose Roberto Aufiero v. Regina Fabbro Aufiero, 7 Juris. Bras., Correção Monetária 274 (TACSP 11/5/75).

^{123.} R.E. 83.646 of the Sup. Trib. Fed., 2d Term, cited in Wald, A Correção Monetária na Jurisprudência do Supremo Tribunal Federal, at note 29, (forthcoming). The Brazilian Association of Magistrates, in conjunction with the Study Commission of the International Union of Magistrates, has recently taken the position that pecuniary obligations should also be subject to monetary correction if they remain unpaid. See Araujo Lima, A Correção Monetária Vista pela União Internacional dos Magistrados, 258 Rev. For. 431, 433 (1977).

prevent injustice and to permit these institutions to continue to function as normally as possible. In Uruguay, the judiciary, particularly the Supreme Court, remained impervious to the problem created by inflation, finally forcing the legislature to intervene with valoristic solutions. The continued functioning of credit and financial markets has required abandonment of the nominalist perception of interest for both usury and tax purposes. And the continued functioning of medium and long-term credit transactions, as well other types of contracts involving deferred performance, has required acceptance and institutionalization of indexation.

Indexation plainly is not a panacea for all of the distortions caused by inflation to the credit and financial markets. It is difficult for many companies and individuals to live with credit costs that can be determined only ex post facto. It is also difficult for many borrowers to be sure that their incomes will keep pace with the rate of monetary correction on their indexed obligations. Especially in the short-run, one effect of indexation may be to raise the effective cost of credit to borrowers. Comprehensive indexation places enormous pressure on the integrity of the index. When billions of dollars turn on a single index point, there is a significant danger that index makers will be placed under severe political pressure to shade their reporting. In Brazil the government has interfered more or less overtly with the calculation of the index used for monetary correction and has insisted that all indexation conform to that single index. In such circumstances, the integrity of the indexation process becomes quite suspect.

As long as countries are experiencing chronic inflation, there are decided advantages to indexation. Without indexation, it is virtually impossible for banks, savings and loan associations, insurance companies, and other types of financial intermediaries to function efficiently with inflation. Moreover, indexation helps promote social justice and saving by permitting the small saver the opportunity to protect his capital from inflationary erosion and enjoy a real rate of return.

Preservation of effective compensation for tort and contract damages under inflationary conditions is also exceedingly difficult without some form of indexation. Where periodical pensions are used to compensate tort plaintiffs for lost earnings or future medical expenses, indexation of the award, or funding it via indexed securities, as is done in Brazil, makes eminent sense. In countries where lump sum awards are used, such as Argentina, the availability of indexed government bonds permits the plaintiff the option of investing the award with both safety and protection from inflation. In this circumstance, the plaintiff is overcompensated, for Argentina does not require that the award be discounted to present value. In countries such as the United States the option of investing in an indexed government security is sorely needed. Discounting a tort award to present value without such an option being readily available

can produce considerable unfairness to tort plaintiffs even at relatively mild

Legal interest rates should be indexed for inflation, or the amount of damages plus interest should be monetarily corrected to prevent the onus of monetary depreciation from falling on the shoulders of an involuntary creditor. Perhaps the simplest approach would be to set the legal interest rate so that it is consistently positive by four or five percent per year. This means the legal interest rate would consist of variations in a general price index plus four or five percent. If the price index increases at an annual rate of 15 percent between the date of the tort or the breach of contract and effective payment, the plaintiff should be entitled to legal interest at the rate of 19 or 20 percent. This would eliminate the present financial incentive for the defendant to delay litigation as much as possible to take advantage of legal interest rates which are negative in real economic terms.

Another way of accomplishing much the same result is by monetary correction of the damage award. Under this approach damages for breach of contract or tort would be calculated as of the day of the breach or tort. The principal plus interest then would be monetarily corrected for general price level changes between that date and the date of payment. This technique is slightly more favorable to the plaintiff in that it adjusts both the interest rate and the principal for inflation. This monetary correction approach eliminates the distortions generated by inflation and affords plaintiffs as complete a recovery as they would have enjoyed in a stable economy.

The monetary correction approach, however, does not adjust for changes in relative prices. If the price of medical care, wages, or the goods being sold rises more rapidly than the general level of prices, the monetary correction approach will leave the plaintiff with an insufficient amount to secure integral reparation. In this event, assessment of damages as of the date of the trial, as is done in most civil law countries, is more advantageous to the plaintiff than the monetary correction approach. If there is a protracted appeal, the debt of value theory clearly provides the plaintiff with better protection than the monetary correction approach.

However, there are decided drawbacks to an approach which requires constant judicial reassessment of damages. It is uneconomic and wasteful for busy courts to have to revalue damages previously assessed. And, in certain circumstances, assessing contract damages as of the date of the trial or appeal allows the plaintiff to speculate at the defendant's expense.

^{124.} See Comment, Future Inflation, Prospective Damages, and the Circuit Courts, 63 VA. L. REV. 105, 125-30 (1977).