

Neutral Citation Number: [2024] EWCA Civ 641

Case No: CA-2023-001273

IN THE COURT OF APPEAL (CIVIL DIVISION)

ON APPEAL FROM THE HIGH COURT OF JUSTICE

BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES

FINANCIAL LIST (KBD)

MR JUSTICE PICKEN

[2023] EWHC 711 (Comm)

Royal Courts of Justice

Strand, London, WC2A 2LL

Date: 12/06/2024

**Before :**

LORD JUSTICE LEWISON

LORD JUSTICE POPPLEWELL
and

LADY JUSTICE FALK

- - - - - - - - - - - - - - - - - - - - -

**Between :**

|  |  |  |
| --- | --- | --- |
|  | 1. **PALLADIAN PARTNERS LP**
2. **HBK MASTER FUND LP**
3. **HIRSH GROUP LLC**
4. **VIRTUAL EMERALD INTERNATIONAL LIMITED**
 | Respondents/Claimants |
|  | **- and –** |  |
|  | 1. **THE REPUBLIC OF ARGENTINA**
 | Appellant/First Defendant |
|  | **(2)   THE BANK OF NEW YORK MELLON (as Trustee)** | Second Defendant |

- - - - - - - - - - - - - - - - - - - - -

- - - - - - - - - - - - - - - - - - - - -

**Mr David Railton KC, Mr Ben Valentin KC, Ms Tamara Oppenheimer KC, Mr Samuel Ritchie and Ms Francesca Ruddy** (instructed by **Sullivan and Cromwell UK LLP**) for the **Appellant**

**Ms Susan Prevezer KC, Mr Alex Barden and Mr James Shaerf** (instructed by **Quinn Emanuel Urquhart & Sullivan UK LLP**) for the **Respondents**

**The Second Defendant** did not appear and was not represented

Hearing dates : 21 – 23 May 2024

- - - - - - - - - - - - - - - - - - - - -

Approved Judgment

This judgment was handed down remotely at 11:00am on 12 June 2024 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

.............................

**LORD JUSTICE POPPLEWELL :**

**Introduction**

1. This appeal is concerned with the proper construction of a short provision in Euro denominated debt securities (‘the Securities’) issued by the Appellant, the Republic of Argentina (‘the Republic’). Payment under the Securities was linked to the Republic’s Gross Domestic Product (‘GDP’). The Securities were issued in two tranches, the first in 2005, following a national financial crisis and sovereign debt default of unprecedented scale. A second tranche was issued in 2010 in materially identical terms. The Securities were an adjunct to the restructuring of some US$94 billion of debt by way of debt swap with the existing creditors.
2. In broad terms, the Securities, which mature in 2035, provided for payment to the holders of an annual coupon, payable if and only if GDP for the calendar year in question exceeded that set out in a table which identified a base case figure for each of the calendar years from 2005 to 2034; and if the growth in GDP from the previous year exceeded the growth in the base case table. Those base case figures fell to be adjusted if and when GDP came to be measured by the Republic using a different data methodology from that at the time the Securities were issued, known as ‘rebasing’. The issue in the appeal is the proper construction of the wording which made provision for the adjustment of the base case figures in the event of such rebasing. The relevant wording is to be found in the terms and conditions of the global securities which accompanied a Trust Indenture dated 2 June 2005 issued by the Republic and countersigned by the Bank of New York Mellon (the Second Defendant in the action) as Trustee.
3. The Respondents are four institutional and corporate investors (‘the Claimants’) who claimed payments for their share of the coupon said to be due for 2013. The Republic contended that no sum was due. Mr Justice Picken (‘the Judge’) upheld their claim and ordered payment of the coupon in the total sum of about EUR 1.3 billion (due to all holders). The Republic appeals with permission of Phillips LJ.
4. At the trial before the Judge there was also an issue as to whether the Claimants’ entitlement under the coupon, if established, entitled them to a judgment in their own right in respect of their holdings, as well as relief being given to the Trustee in respect of all holders of the Securities. That issue was resolved in favour of the Claimants and has not been the subject of an appeal. The Judge also had before him an alternative claim by the Claimants that if they failed on the construction issue, the Republic was liable for having made its determination of GDP for 2013 in bad faith. The Judge did not need to decide that issue and did not do so. The appeal proceeds, therefore, solely on the question of construction.

**Concepts used in measuring GDP**

1. The language of the Securities is to be interpreted against the background of some of the basic concepts used in measuring GDP. What follows was common ground between the parties and the experts whose evidence was adduced at trial.

*Nominal GDP in current prices and real GDP in constant prices*

1. As is well known, GDP is a measure of a country’s economic output in terms of goods and services. It is not limited to market services but includes, for example, the value of education services provided by the government within a country. It is an important macroeconomic indicator used internally to determine policy, for example fiscal, monetary and industrial policy; and externally in informing international views of the strength and trajectory of a country’s economy.
2. In measurement of GDP three broad approaches may be adopted. An expenditure approach seeks to identify the total sum of expenditure on final goods and services purchased by all users; a production approach seeks to measure the incremental added value at each stage of production; an income approach seeks to measure by reference to the total wages, interest, rent and profits received by households. In practice a combination of such approaches will often be used. The Republic predominantly used the production and expenditure approaches. Its GDP data were compiled and published by The National Institute of Statistics and Censuses (‘INDEC’), which is a public body within the orbit of the Republic’s Ministry of Economy.
3. The exercise not only requires selection of one or more of these approaches, but also decisions to be made as to what goods and services are included (for example whether to include the black economy); what relative value and weighting is to be given to different aspects of production of goods and provision of services; and what prices or monetary values are to be attributed to each. There are some international standards, but how a country estimates GDP is to a significant extent a matter of choice and ultimately within its own control. It will choose the basket of goods and services to be measured, how it is to be measured, how the data are collected in order to measure it, and how the relative weighting and value is attributed to goods and services in the basket. These all involve judgements which, within certain parameters, are a matter of choice and subjective evaluation for the government.
4. So far as value is concerned, this may be expressed in current value or a historic value, referred to respectively as ‘current prices’ or ‘constant prices’. Current price GDP is the estimate of the value of the goods and services expressed using the current contemporaneous price/value of those goods and services. This is known as ‘nominal GDP’. It is an estimate of the present value of GDP. Nominal GDP is not, however, a useful measure for the purposes of assessing the extent of change in GDP from year to year because price inflation would result in an increase in GDP even were there to be no change in the output of goods and services. One method commonly adopted to meet this problem is to express GDP in constant prices, thereby seeking to strip out the effects of price inflation and measure the true change in output. This is known as ‘real GDP’, and was expressed in the Securities as ‘Actual Real GDP’.
5. Real GDP is measured by reference to constant prices for a particular year, known as the base price year. The volume of output is assessed in current year terms, but the prices applied to those volumes are the historic prices from an earlier year. The earlier year is the base price year for the estimate. In the Securities this base price was defined as ‘Year of Base Prices’ (‘YOBP’) and was 1993 when the Securities were issued in 2005 (and 2010). Figures for real GDP which are expressed for different years in the same year of base prices are commonly referred to as GDP in that year’s ‘series’ or that year’s ‘constant prices’. Argentina’s real GDP for the years from 1993 to 2012 was expressed by reference to 1993 year of base prices and is therefore referred to as GDP measured in a 1993 series or in constant 1993 prices for that period. GDP was rebased to 2004 year of base prices with effect from 2013.
6. A series uses that year’s prices, prices here meaning the values attributed to the various goods and services by whatever valuation methodology has been chosen; and additionally that year’s methodology in terms of the scope of the goods and services included and how they are measured. These aspects of the methodology used for a particular year were referred to in the evidence as the ‘scope’ of that year’s base prices.
7. As societies evolve and change, the scope needs to be replaced with new methodology intended better to reflect the measurement of output in the changed economic structure of the country. This requires adjustments for product changes and quality changes, to both existing and new goods and services. For example, it will be appropriate to adjust the measurement of value in output of computers, or mobile phones, in line with their technological developments since the 1990s; and the effect of the internet and e-commerce; changes can reflect any discoveries of new resources, or the invention of new products, applications or services which were not measured at all in the base year methodology. The rebasing can involve changes in the weightings of value attributable to production; so a unit of production in one industrial centre may be treated as half as valuable in the base year prices as another; yet over time its quality and composition may improve so that it is to be treated as twice as valuable as the other unit. Accordingly the year of base prices needs to be revised periodically to a new year of base prices to be used for real GDP. This also enables the use of new data sources, and methodological and statistical changes in data measurement and compilation methods.

*Rebasing*

1. It is this rebasing which is central to the arguments on the appeal. A number of aspects of rebasing as found by the Judge and/or agreed by the experts are relevant.
2. The international recommendation, promulgated by the International Monetary Fund (‘IMF’), and by the System of National Accounts (‘SNA’) which is produced by the statistical division of the United Nations, is that rebasing should take place every 5 to 10 years. Accordingly the expectation of the Republic and those holding the Securities would be that there would be successive rebasings over the lifetime of the Securities until expiry in 2035.
3. The experts agreed that the intention of rebasing is to improve the accuracy of real GDP as an assessment of output. The Judge found that each rebasing is likely to produce a better estimate of true output than the previous one. The approximation to true GDP will be at its closest when the GDP is measured in a recent basis price, which will reduce as the base year becomes more historic and the structure of the country’s economy changes, such that the base year becomes less representative of the current position.
4. When there is a change in the base price year, growth can only be measured in the year of change by putting that year and the previous year into the same year of base prices so as to compare like with like. This previous year, the last year in the constant prices of the old base year, was defined by the Republic for the purposes of argument as the ‘Overlap Year’. That is not a particularly apt word, since it is not a year in which anything overlaps, but I shall adopt it for the purposes of recounting and examining the arguments. It is important to keep in mind, nevertheless, that it is not a term which features in the Securities. Putting the Overlap Year and the first rebased year GDP into the same year of base prices so as to measure growth in the latter year could be achieved by one of two alternatives: by applying the old base price to GDP in the first rebased year, or by applying the new base price to the Overlap Year. The Securities chose the latter. This meant that it was necessary when rebasing to publish GDP in new constant base year prices for the Overlap Year, for comparison purposes only, although GDP had been measured for the Overlap Year in the constant prices for the old base year. In fact, for statistical comparison purposes, it was also the Republic’s practice when rebasing (which we were told is a common practice) to publish GDP figures in the new base year series for all the years back to the year of the base year itself (and on occasion beyond). This is known as ‘backcasting’. So in 2014, when the Republic rebased the 2013 GDP for the first time in 2004 constant prices, it published GDP figures in 2004 constant prices, not only for 2012, which enabled growth in 2013 GDP to be measured using the same constant prices, but also for all the years back to 2004.
5. This did not, of course, change the fact that GDP for 2004 to 2012 was and remained that published in 1993 constant prices. However it illustrates that published GDP is no more than an estimate and is sensitive, amongst other things, to when and how a rebasing occurs. The backcast figures also illustrate the extent to which changes in scope involved in the change of base year constant prices affect measurement of GDP. The experts agreed that the change in scope from 1993 constant prices to 2004 constant prices accounted for an increase in GDP of about 27% which was not referable to price inflation.
6. The choice of when to rebase, and by reference to which new year of base prices, lies within the control of each country publishing its real GDP. That choice will affect not only the estimate of GDP going forward but also the measurement of growth between the Overlap Year and the first rebasing year. As will be seen, it will also affect other aspects of how the Securities perform.
7. The relationship between GDP levels measured in different constant price series is not linear. For one year, year A, the two series might measure the real GDP differently by a factor of 1.8 whilst for another year, year B, the difference might be by a factor of 1.9. As a consequence, the relationship between GDP growth in the two series is not linear. So for a given pair of consecutive years, one series might measure the GDP growth as 4% but the other series measure it as 2%. One series might measure it as positive growth when the other series could measure it as negative growth i.e. recession. Again as a consequence of the non-linear effect of rebasing, the growth trajectories, meaning the average growth rates over time, will not be the same in the two different base price series.
8. These divergences were illustrated by two sets of figures on which the Claimants relied:
	1. The rebasing of the real GDP figures from 1993 series to 2004 series would, if applied to 2008 GDP, have changed an annual growth figure of 6.76% in 1993 series to one of 3.10% in 2004 series, a difference of 3.66%.
	2. If real GDP were measured for 1950 to 1962, the mean annual growth over the period would be 1.46% in 1950 series but 2.92% in 1960 series. The difference for 1956 would be between minus 0.18% growth (1950 series) and 2.78% growth (1960 series). For 1958 it would be 2.68% growth in 1950 series but 6.10% in 1960 series.
9. It is also worth emphasising that ‘true’ GDP does not exist as a real world concept because GDP may legitimately be measured in a variety of ways, and all real GDP, as published, is no more than an estimate which is variable depending upon choices and value judgments of which base price year to apply, and for what years, and the scope of the base year price applied to any given year. Published GDP is also dependent on the diligence and efficiency (and good faith) of the process of collecting the data and applying the methodology, which will never be perfect.

**The background to the issue of the Securities in 2005**

1. The debt restructuring involved creditors receiving a small amount in cash by way of outstanding interest and swapping debt for three different kinds of bonds. The ‘haircut’ involved in the restructuring of some US$ 94 billion of debt is said to have been about 75%.
2. The genesis of these Securities, as ancillary to the debt restructuring, lay in a view expressed by some of the institutional creditors during the restructuring negotiations, that the Republic’s projections of growth were unduly pessimistic. The idea was that the GDP-linked Securities would be a ‘sweetener’ for those who took that view. They were available only to those participating in the main restructuring, in proportion to their participation, but became detachable and tradable as independent instruments after 180 days. Thereafter they were, as envisaged, traded on the secondary market, having been listed on the Buenos Aires and Luxembourg Stock Exchanges, and over the counter.
3. It is clear from the contemporaneous literature relied on by the parties that GDP-linked securities were not a form of instrument in common use in 2005, and there was no consensus at the time on how they might be structured to meet various potential objections or anomalies. We were told that they have not gained significantly greater use since then. These are not, therefore, standard instruments issued against a history of established practical experience or subject to standard wordings.
4. The holders of the existing debt and the restructured debt were not all international institutional investors. A large proportion, perhaps a majority, were Argentinian investors; and overall there was a large proportion of retail investors, in one estimate 43.5% and in another 35%. Nevertheless the wording of the Securities was the subject matter of scrutiny by lawyers acting for a number of institutional investors as well as lawyers acting for the Republic. As will be seen, the provision in issue in this case was of central importance to the question whether and how much the bonds would pay. The Republic and the institutional creditors, and the lawyers advising them, can be expected to have focussed closely on its wording.
5. The Judge treated the relevant factual matrix against which the Securities fell to be construed as limited to (1) the GDP concepts to which I have referred (2) the background of unprecedented sovereign debt default and (3) the intention behind the Securities being that payments would only be made when the Argentine economy was growing at a sufficiently healthy rate and that they would not be made if the Republic’s economy was not growing.
6. The third element has given rise to controversy between the parties and I shall return to it below.
7. Mr Railton KC argued that Judge wrongly failed to accept as factual matrix material in various presentations to international investors, some of which was published on INDEC’s website at the time, to the effect that the intention was (a) to measure GDP by reference to actual growth, not tied to historic prices and (b) to measure GDP growth by reference to a benchmark of growth in the medium to long term of 3%. I would reject the submission that this is material which is admissible or relevant to the construction of the Securities for reasons given below.

**The terms of the Securities**

1. The relevant terms of the Securities are set out in Annex 1 to this judgment. In what follows, defined terms are italicised. Each calendar year from 2005 to 2034 is a *Reference Year*. There are two definitions which are of critical importance to the conditions which must be met to trigger a payment, and to the amount of such payment, namely *Actual Real GDP* and *Base Case GDP*.
2. The definition of *Actual Real GDP* captures the concept of real GDP used by the Republic in its published GDP figures, as “the gross domestic product of Argentina for such Reference Year measured in constant prices for the *Year of Base Prices*, as published by INDEC”. *Year of Base Prices* (‘YOBP’) means the year 1993 provided that if “at any time” INDEC uses another year as a base price year, it means the new base year of constant prices. YOBP therefore means the base year for estimating real GDP actually used by INDEC from time to time, initially 1993 but the new base year following a rebasing.
3. *Base Case GDP* is defined by introductory words which provide that it means the amount set forth in a chart which follows, which in turn is followed by a proviso addressing adjustment in the event of a rebasing. The chart sets out a figure for each of the *Reference Years* 2005 to 2034 expressed in “millions of constant 1993 pesos”. The chart does not set out the percentage growth for each year, but it can readily be calculated mathematically from the figures, and I accept, as the Republic submitted, that the precise figures used in the chart must have been the result of applying the percentages in order to produce them. For the years 2005 to 2014, the percentage growth implicit in the figures in the chart is not constant for each year, starting at 4.26% and reducing in in a non-linear way until 2015; in and after 2015 the figures represent 3% growth for each *Reference Year* until expiry of the Securities.
4. The proviso, to which I shall refer as ‘the Adjustment Provision’, is in the following terms:

*“provided* that, if the Year of Base Prices employed by INDEC for determining Actual Real GDP shall at any time be a calendar year other than the year 1993, then the Base Case GDP for each Reference Year shall be adjusted to reflect any such change in the Year of Base Prices by multiplying the Base Case GDP for such Reference Year (as set forth in chart above) by a fraction, the numerator of which shall be the Actual Real GDP for such Reference Year measured in constant prices of the Year of Base Prices, and the denominator of which shall be the Actual Real GDP for such Reference Year measured in constant 1993 prices.”

1. These definitions of *Actual Real GDP* and *Base Case GDP*, in the latter case as adjusted after a rebasing in accordance with the Adjustment Provision, feed into (a) the conditions triggering a payment, and (b) the amount of the payment, in the following way.
2. The conditions are found in clause 2(b) which provides:

“Notwithstanding anything to the contrary hereunder, Holders of this Security shall not be entitled to receive any payment pursuant to this Security in respect of any Reference Year unless (i) Actual Real GDP for such Reference Year is greater than Base Case GDP for such Reference Year, (ii) Actual Real GDP Growth for such Reference Year is greater than Base Case GDP Growth for such Reference Year, and (iii) the aggregate amount of all payments made by the Republic hereunder, when added to the amount of such payment, does not exceed the Payment Cap.”

1. I shall refer to the first condition as ‘the Level Condition’; the second as ‘the Growth Condition’; and the third as ‘the Cap’. The Cap is 48% of the outstanding notional amount of the Security. The Level Condition is designed to ensure that Actual Real GDP is greater than Base GDP in the given year in absolute terms, irrespective of growth. So if, for example, in previous *Reference Years* GDP has fallen behind the Base Case GDP, the trigger for payment does not occur, despite sufficient growth in the *Reference Year* in question to meet the Growth Condition, unless it reaches the level of the base case for that year in the chart. It is not in dispute that the Level Condition was met for Reference Year 2013. The issue is whether the Growth Condition was met for 2013 after rebasing for that year.
2. As to payment, the Securities provide for payment each year of a *Payment Amount* which is the holder’s share of 5% of *Excess GDP* converted into Euros. *Excess GDP* is the amount by which *Actual Nominal GDP* exceeds *Nominal Base Case GDP.* This is designed to ensure payment by reference to current (nominal) prices, not the historic constant prices used in the calculation of *Actual Real GDP* and *Base Case GDP*. In the case of *Actual Nominal GDP* it is “the gross domestic product for such Reference Year measured in current prices of such Reference Year”, although the definitions apply an unnecessary complexity in referring to the *GDP Deflator* (in this case an inflator) which drops out of the calculation. In the case of *Nominal Base Case GDP*, it converts the *Base Case GDP* to current (nominal) prices by use of the *GDP Deflator* whose definition is that it is the ratio between GDP in current prices and *Actual Real GDP*, i.e. real GDP in the historic YOBP pricing. The way the proviso to the *Base Case GDP* chart operates on a rebasing will therefore have an effect on the conversion into *Nominal Base Case GDP* and therefore into the *Payment Amount*.

**What happened: the rebasing**

1. By the time the Securities were issued the 1993 YOBP was 12 years old in its scope and pricing, and steps had already begun to assemble data to enable a rebasing. In 2004 a national economic census and a survey of household income and expenditures were commenced to provide two central information sources. These were then reviewed and verified against a range of data from other sources in order to produce the necessary statistics for the new base year. Methodological changes were also implemented during the data processing stage. This took several years to complete. The 2004 economic census data had been collected manually and had to be digitalised and checked, a process which continued until the end of 2008.
2. By that time, the SNA had introduced significant methodological changes. INDEC sought to align with these new international standards as well as seeking to capture the very significant structural changes which the Republic’s economy had undergone between 1993 and 2004, including the collapse of the convertibility regime and the shutdown of international debt markets, which had pushed the Republic to produce many of the goods it had previously imported.  As INDEC worked on these matters, the 2004 household income survey became outdated and had to be repeated.
3. From June 2011 the IMF issued a series of so-called K-1 reports, containing demands, questions and observations regarding the Republic’s inflation and GDP statistics. With respect to GDP statistics, in particular, the IMF’s principal concern was that the methodology for calculating GDP was outdated and that as a result GDP was being overstated.  The IMF in its supervisory role became increasingly insistent on the publication of the GDP in the new base year by deadlines which the Republic said it was unable to meet.
4. During 2013 INDEC published quarterly GDP figures in 1993 YOBP for the first three quarters. The new survey results became available towards the end of 2013. On 27 March 2014 INDEC published “preliminary” GDP for the 2013 calendar year in 2004 YOBP, as the new year of rebasing, together with such figures for 2012 GDP in 2004 YOBP for comparison purposes to measure growth.
5. On 9 May 2014 INDEC published GDP backcasting statistics for each of the years 2004 to 2012 in 2004 YOBP together with details of the methodology for the rebasing.
6. Following the March 2014 publication of *“*preliminary*”* GDP data in the 2004 YOBP, further releases of“provisional” and “provisory” data were made in June and September 2014, as was customary in the Republic, following the rebasing. According to these data, GDP growth in 2013 in 2004 YOBP was 2.93%.
7. On 11 December 2014, the Ministry of Economy determined that no payment was due under the Securities for Reference Year 2013, formalised in a memorandum issued by the Office of Public Credit which stated that the Republic had adopted a “one-off” adjustment to Base Case GDP. This gave a Base Case GDP growth rate of 3.22% for 2013, which was greater than the growth rate in Actual Real GDP for the year of 2.93%. On 15 December 2014 the Republic announced that no payment would be made under the Securities. Further revisions to 2013 GDP in 2004 YOBP were made in 2016 reducing the growth rate to 2.3%.
8. Once INDEC had adopted the new base year, it ceased measuring or publishing GDP data in 1993 YOBP, following what the Judge described as standard international practice.  It did not publish fourth quarter GDP figures for 2013 in 1993 YOBP, although they were available, nor any full year 2013 GDP figures in 1993 YOBP. The last full year for which GDP in 1993 YOBP was published by INDEC was 2012.

**The arguments in outline**

1. The construction of the Adjustment Provision is the issue in the appeal. The Claimants contend that for each *Reference Year* in which 1993 is no longer used as the YOBP for real GDP published by INDEC, there is to be an annual adjustment to the figures in the Base Case GDP chart applying the fraction set out in the Adjustment Provision. This will produce a different set of figures for the chart upon each annual adjustment because the use of *Actual Real GDP* in both the numerator and denominator means that the fraction will vary according to the real GDP measured each year. This was referred to by the parties and the Judge as ‘the Annual Adjustment construction’. It requires data to be available, for the lifetime of the Securities, which measures real GDP in 1993 constant prices as well as the real GDP published using a rebased YOBP. The Claimants contend that there is an implied term that the Republic will publish such 1993 basis GDP data, as necessary in order to make the Adjustment Provision operable in accordance with its express language.
2. The Republic contends that upon a rebasing, there is a one-off adjustment to the Base Case GDP chart figures, adjusting the figure for each *Reference Year* by the fixed fraction expressed in the Adjustment Provision. Those figures then remain unchanged for following years, unless and until there is second or subsequent rebasing, in which case there is a further one-off adjustment in the first year of each subsequent rebasing. The fraction is applied using the Actual Real GDP not from the first new YOBP year (2013 in this case) but the Actual Real GDP in the previous year, the Overlap Year (2012 in this case). The effect of such adjustment is that whilst the figures themselves are amended once on each rebasing, the growth rates in the chart are preserved, tapering to 3% from 2015. This, it is said, preserves the base case as a benchmark and the growth rate which it was intended would have to be surpassed in order for a payment to become due. This was referred to by the parties and the Judge as the ‘One-Off construction’. This is said to arise as a matter of construction of the words used in their context having regard to the economic and commercial consequences of the rival constructions. Alternatively, the Republic argues, the words should be corrected to give it that meaning by the principle of correction of mistakes by interpretation recognised and applied in *Chartbrook Ltd v Persimmon Homes Ltd* [2009] 1 AC 1101 (‘the *Chartbrook* principle’).
3. For the purposes of the *Chartbrook* principle argument, the Republic pleaded that the wording should be corrected so as to read as follows:

“… provided that, if the Year of Base Prices employed by INDEC for determining Actual Real GDP shall at any time be a calendar year other than the year 1993, then the Base Case GDP for each Reference Year shall be adjusted to reflect any such change in the Year of Base Prices by multiplying the Base Case GDP for such Reference Year (as set forth in chart above**, or as previously adjusted**) by a fraction, **calculated for the last Reference Year for which official INDEC data is available**, the numerator of which shall be the Actual Real GDP for such Reference Year measured in constant prices of the Year of Base Prices, and the denominator of which shall be the Actual Real GDP for such Reference Year measured in constant 1993 prices **(or, if INDEC has effected more than one change, the previous Year of Base Prices)**.”

1. The Republic has a fall back argument, which is that if the Claimants are right in their case that the provision involves annual adjustments, the Claimants have nevertheless used the wrong denominator in the fraction. It is not GDP in 1993 YOBP, but rather GDP in 2004 YOBP to which there should be applied a price deflator in accordance with a formula proposed by its expert Professor Hubbard. This was referred to as the ‘Hubbard Deflator construction’. For the purposes of its alternative *Chartbrook* principle argument, the Republic pleaded that the wording should be corrected so as to read as follows:

 *“... provided that, if the Year of Base Prices employed by INDEC for determining Actual Real UDF shall at any time be a calendar year other than the year 1993, then the Base Case GDP for each Reference Year shall be adjusted to reflect any such change in the Year of Base Prices by multiplying the Base Case GDP for such Reference Year (as set forth in chart above) by a fraction, the numerator of which shall be the Actual Real GDP for such Reference Year measured in constant prices of the Year of Base Prices, and the denominator of which shall be the Actual Real GDP for such Reference Year measured****~~in constant 1993 prices~~ [in the new Year of Base Prices as published by INDEC, adjusted for inflation from pesos in the new Year of Base Prices to 1993 pesos using the INDEC-published deflator from 1993 to the new Year of Base Prices.].****”*

**The Judgment**

1. In a full and carefully reasoned judgment, the Judge summarised the relevant principles of construction in two respects. The first, which applied to the primary way in which the Republic put its case, was the iterative process involved in ascertaining the meaning of the words used by reference to the background context reasonably available to the parties and the economic and commercial consequences of the rival constructions. The second was in respect of the *Chartbrook* principle. No criticism is made by either side of that part of the judgment identifying the applicable principles. Rather, the Republic contends that the Judge erred in the application of the principles, in particular because the Judge failed to take proper and sufficient account of the commercial and economic consequences of the rival arguments. One aspect of this criticism is that the Judge dealt in detail with these aspects of the Republic’s case in the section of the Judgment dealing with the *Chartbrook* principle and so could be seen not to have properly taken them into account in the iterative process applicable to the primary construction argument. This seems to me an unfair criticism which puts form above substance. Although the Judge’s detailed reasoning on this aspect did appear in the part of the Judgment dealing with the *Chartbrook* principle argument, he also made clear at [171] that he was taking it into account in relation to the iterative construction process. There is no reason to suppose that he failed to do what he said he was doing, and to take it into account in reaching his conclusions on that issue. The question of substance is whether his conclusion was right.
2. It is not possible to do justice to the Judge’s detailed reasoning in the form of a brief summary, but his conclusions can be expressed as follows.
	1. As to the language of the Adjustment Provision, it cannot bear the meaning for which the Republic contends: the words clearly mean what is captured in the Annual Adjustment construction for which the Claimants contend.
	2. As to the economic and commercial consequences, the Judge accepted that there were good economic and commercial reasons for the Annual Adjustment construction and that in relation to those relied upon by the Republic in favour of the One-Off construction, there were flaws or reasons for treating them as of limited weight (my language, not the Judge’s).
	3. As to the *Chartbrook* principle, neither of the two conditions for its application was fulfilled. The meaning of the words, on the Annual Adjustment construction, was not irrational or absurd; and the One-Off construction was merely one of several alternatives which might have been chosen.
	4. The Hubbard Deflator construction was “hopeless”.

**The arguments in more detail**

1. On behalf of the Republic, Mr Railton emphasised the following aspects of the commercial and economic consequences.
	1. The effect of the Annual Adjustment construction, as was common ground between the experts, was the same as if, for the purposes of the Securities, Actual Real GDP were measured in 1993 YOBP for the entire duration of the bonds until expiry in 2035. There could be no sensible reason why either the Republic or bondholders would want to tie the payment amount and payment conditions to the 1993 YOBP methodology, which would be an outdated and superseded measure of GDP and increasingly unreliable as a measure of true GDP, for 30 years.
	2. A consequence of the Claimants’ construction is that the Republic could be required to make payment under the Securities when its economy was not growing but in recession, thus jeopardising the Republic’s ability to service both its GDP-linked and conventional debt. This was illustrated by figures posited by Dr Borensztein, the Republic’s expert, which were accepted by the Claimants’ expert Dr Buiter (I should explain that those were the experts on GDP-linked securities; there were also experts on GDP statistics, Mr Davies for the Claimants and Professor Hubbard for the Republic). This consequence is inconsistent with the fundamental purpose of the Securities, as found by the Judge, as being to ensure the sustainability of payments for the Republic, to stabilise its position and to prevent another default; and with the Judge’s third factual matrix point that the intention was that payments would only be made when the Argentine economy was growing at a sufficiently healthy rate and not made if the economy was not growing.
	3. The Annual Adjustment construction would require 1993 YOBP figures for real GDP to be maintained for all reference years after a rebasing for the lifetime of the bonds, although it would serve no practical purpose in the measurement of GDP, and was something which the experts agreed had never been done by any statistical institution in the world. The provision fell to be construed against the expectation that such figures would not be available, in which case the Annual Adjustment construction would be inoperable; rather than by reference to the Judge’s finding that if that was what was required by the provision there would be an implied term that the Republic must publish 1993 YOBP figures.
	4. The One-Off construction results in the growth differentials in the Base Case chart, tapering to 3% from 2015, being maintained whenever there is an adjustment. It therefore keeps them as a benchmark, apparent from the outset as a benchmark of growth, and as *the* benchmark which was intended to remain throughout the lifetime of the bonds, as is evident from the factual matrix evidence which the Judge wrongly declined to take into account. By contrast the annual adjustment required by the Claimants’ construction results in a different percentage of base case growth between different years, constantly changing year by year.
	5. The One-Off construction gives certainty in advance because the adjustment to the base case would be known prior to each annual GDP announcement for the duration of each rebasing. By contrast the Annual Adjustment construction would not enable a holder, or the Republic, to identify what benchmark had to be met in any year after a rebasing because it would be adjusted by reference to the Annual GDP for that particular year, which would not be known until after the year end.
2. In the light of these consequences, and the factual matrix, the language of the Adjustment Provision is compatible with the One-Off construction. The opening phrase “if…at any time” is apt to identify a trigger for a one-off change. The word “such” as applied to Reference Year in the numerator and denominator of the fraction is a reference to the Overlap Year, which, whilst not itself expressly identified in the provision, is the logical choice as the first year which it is necessary to put into the new YOBP figures in order to measure growth on a rebasing. In the event of a second and subsequent rebasing, the final reference to 1993 prices in the denominator needs to be treated as the YOBP of the immediately previous YOBP, but that can be achieved by implying such a term, so as to give effect to the purpose of the provision, which is less intrusive than the implied term as to maintenance of outdated 1993 YOBP statistics which is required by the Claimants’ implied term.
3. Moreover, the Annual Adjustment construction, it is argued, renders the whole Adjustment Provision redundant.
4. On behalf of the Claimants, Ms Prevezer KC and Mr Barden argued that the language of the Adjustment Provision is plainly and unambiguously that of an annual adjustment. The introductory words “if…at any time” refer to all times at which one is considering a Reference Year which is no longer in 1993 YOBP. That is the Reference Year to which “such” refers in the numerator and denominator of the fraction. The denominator is unequivocal in requiring the use of 1993 constant prices whenever the fraction falls to be applied, whether on a first rebasing or subsequent rebasings. There is nothing in the wording of the provision to suggest the concept of the ‘Overlap Year’ or its use in the fraction to be applied to the Base Case GDP. The redundancy argument is misconceived: it is not that the Securities would operate in the same way if it were simply removed, but rather that if it were removed and other terms rewritten the same result could have been achieved. This is not an argument of surplusage but rather that the result could have been achieved by different drafting of the instrument as a whole, which is of no weight in construing it. The implied term arises naturally from the fact that the instrument does not expressly require anything to be published by the Republic, so that it is obvious, and was common ground, that there must be implied a term that it will publish the figures necessary for the instrument to be operable in accordance with its terms. Continuing publication of GDP in 1993 YOBP is simply what is required as the specific content of the application of this implied term.
5. As to the commercial and economic consequences, there are, they submitted, good reasons why the parties would have wanted to provide for an adjustment in accordance with the Annual Adjustment construction.
	1. The Annual Adjustment construction is economically logical in applying revised growth rates to the base chart, because different series are non-linear in their effect. The base chart growth rates are in 1993 series and when a different series is used for Real Actual GDP, which imports different growth rates in Actual Real GDP from those which would apply in a different series, it is logical to apply the same difference in growth rates to the other side of the comparator, the adjusted Base Case GDP, so as to be comparing like with like.
	2. It preserves the bargain and provides certainty because its effect is, as the experts agreed, that both the Level Condition and the Growth Condition will be satisfied in a new YOBP if and only if they are satisfied in 1993 YOBP. By contrast the One-Off construction “moves the goalposts” and is arbitrary. It will produce different figures depending on which year is chosen as the new year of base prices and therefore as the Overlap Year, and that choice will determine the levels of the adjusted Base Case GDP for all future years until a rebasing, which in turn affects whether the Level Condition is met. Where there are multiple rebasings the distorting effect is magnified. If the operative year for a one-off change in the chart involves an outlier in each case, the difference from what the adjustment would have produced had a more typical year been used will be all the more marked.
	3. Moreover, putting such financial consequences within the Republic’s gift gives rise to the moral hazard of manipulation which was recognised as a potential concern for investors in the early literature examining the feasibility and hazards of GDP-linked securities.
	4. The One-Off construction breaks the proportional link between changes in Actual Nominal GDP and changes in the Payment Amount.
	5. There is nothing uncommercial in parties tying themselves to “the devil they know” in 1993 YOBP pricing. The literature illustrates that one way in which it was contemplated that GDP-linked securities might be structured was to tie them to an outdated year of constant base prices with an obligation on the country to maintain figures in the original base case pricing after rebasing had occurred.
	6. It is accepted that there are various adjustment methods which might have been adopted, including but not limited to that contended for by the Republic. But that does not undermine the fact that what was chosen was a solution which is expressed clearly and unambiguously in the language of the clause and which has a coherent degree of economic and commercial logic.

**The law: principles of construction**

1. There was no dispute between the parties as to the approach to construction of contracts. The Judge referred to a number of cases, including, amongst others, the House of Lords and Supreme Court decisions in*Investors Compensation Scheme Ltd v West Bromwich Building Society* [1998] 1 WLR 896; *Chartbrook Ltd v Persimmon Homes Ltd* [2009] 1 AC 1101; *In Re Sigma Finance Corporation* [2009] UKSC 2 [2010] 1 All ER 571; *Rainy Sky SA v Kookmin Bank* [2011] UKSC 50 [2011] 1 WLR 2900; *Arnold v Britton* [2015] UKSC 36 [2015] AC 1619; and *Wood v Capita Insurance Services Ltd* [2017] UKSC 24 [2017] AC 1173.
2. Although the Judge cited passages from these and other cases in some detail (and this is not a criticism), I do not regard it as necessary to do so for the purposes of this appeal, nor to seek to distil or paraphrase the learning set out in the authorities. I would merely emphasise a few aspects as of particular relevance to the current dispute.
3. Contractual construction involves determining the meaning of what the parties have said, not what they meant to say, as Lord Simon emphasised in *Wickman Machine Tool Sales Ltd v L. Schuler AG* [1974] AC 235 at p. 263E-G. The iterative process required involves testing rival meanings of the language used against their commercial and economic consequences, against the background of admissible contextual material, but this must not be permitted to undervalue the importance of the language used. As Lord Neuberger emphasised in *Arnold v Britton* at [17],

“First, the reliance placed in some cases on commercial common sense and surrounding circumstances (e.g. in *Chartbrook*, paras 16-26) should not be invoked to undervalue the importance of the language of the provision which is to be construed. The exercise of interpreting a provision involves identifying what the parties meant through the eyes of a reasonable reader, and, save perhaps in a very unusual case, that meaning is most obviously to be gleaned from the language of the provision. Unlike commercial common sense and the surrounding circumstances, the parties have control over the language they use in a contract. And, again save perhaps in a very unusual case, the parties must have been specifically focussing on the issue covered by the provision when agreeing the wording of that provision.”

1. In this context, a court should be wary of assuming that it knows what is or is not commercially sensible where the language used points to a clear answer, as Lewison LJ observed in *Napier Park European Credit Opportunities Fund Ltd v Harbourmaster Pro-rata Clo 2 BV* [2014] EWCA Civ 984 at [37]. Parties who have chosen clear language in which to express their bargain can be assumed to understand the commercial and economic context and can usually be assumed to have intended the result, and therefore, *ex hypothesi*, not to have regarded it as one which has no commercial or economic rationale.
2. That is particularly so where, as in this case, contract terms have been negotiated and prepared with the assistance of skilled lawyers, and where the provision in question is an important one on which the lawyers and their clients can be expected to have focussed their attention, and to have taken care to ensure that it accurately expressed the bargain. The Adjustment Provision is critical to the operation of the Growth Condition and Level Condition which are at the heart of the instrument, determining when a payment is due, and affects the amount of any payment. If the language points clearly to one construction, the court should not readily conclude that the sophisticated parties involved in agreeing to it, with their understanding of GDP concepts and the benefit of advice on drafting from lawyers on both sides, would have regarded the economic and commercial consequences as anything other than that which follow from the word used.
3. There may be a number of different outcomes which the parties might hypothetically have wanted to achieve, with differing degrees of attraction in terms of the commercial and economic consequences. But however sensible it might have been for them to have made a particular choice by reference to its economic or commercial consequences, the court cannot give effect to that result by a process of construction unless the language used is capable of bearing that meaning, because construction is an exercise in ascertaining the meaning from the language used. As Lord Hodge said in *Arnold v Britton* at [77], there must be a basis in the words used, within their factual matrix, for the rival meaning. As Lord Clarke said in *Rainy Sky* at [23], where the parties have used unambiguous language, the court must apply it.
4. I would also emphasise that where the instrument in question is a bond which will be traded in the market, particular care needs to be taken to ensure that what is relied on as factual matrix is material which was not only reasonably available to the original parties when the instrument came into existence, but also reasonably available to an investor when purchasing the instrument in the market, in the sense that the market investor can reasonably have been expected to have sought it out. The Adjustment Provision in these Securities must mean the same for holders who purchase them many years after they were issued as for the original holders, and the relevant factual matrix is limited to what it is reasonable to expect such investors to have taken into account. The primary source of understanding for such an investor will be the words used in the instrument, supplemented in case of any doubt by the prospectus. Such an investor cannot reasonably be expected to delve into the detail of what may have passed between the issuer and original investors when the instruments were being proposed, or to have searched a website to see what was published at the time. The primacy of the words used in the instrument is particularly acute in such cases, although the iterative process of considering the commercial and economic consequences still falls to be applied. A similar point was made by Lord Collins in *In re Sigma Finance* at [37].
5. One further aspect the relevant principles is of significance in this case. In *Wood v Capita*, Lord Hodge said at [13]:

“Textualism and contextualism are not conflicting paradigms in a battle for exclusive occupation of the field of contractual interpretation. Rather, the lawyer and the judge, when interpreting any contract, can use them as tools to ascertain the objective meaning of the language which the parties have chosen to express their agreement. The extent to which each tool will assist the court in its task will vary according to the circumstances of the particular agreement or agreements. Some agreements may be successfully interpreted principally by textual analysis, for example because of their sophistication and complexity and because they have been negotiated and prepared with the assistance of skilled professionals. The correct interpretation of other contracts may be achieved by a greater emphasis on the factual matrix, for example because of their informality, brevity or the absence of skilled professional assistance. But negotiators of complex formal contracts may often not achieve a logical and coherent text because of, for example, the conflicting aims of the parties, failures of communication, differing drafting practices, or deadlines which require the parties to compromise in order to reach agreement. There may often therefore be provisions in a detailed professionally drawn contract which lack clarity and the lawyer or judge in interpreting such provisions may be particularly helped by considering the factual matrix and the purpose of similar provisions in contracts of the same type. The iterative process, of which Lord Mance spoke in *Sigma Finance Corpn* (above), assists the lawyer or judge to ascertain the objective meaning of disputed provisions.”

1. Because the Adjustment Provision is of central importance to the Securities and must have been focussed on by the parties and those skilled professionals involved in its negotiation and drafting, and because the language in which it is expressed will be the primary source available to purchasers in the secondary market in understanding its effect, it is, in Lord Hodge’s words, the type of agreement which can be successfully interpreted principally by textual analysis unless it lacks clarity. Textualism is, in this case, the most useful tool, although not the only one.
2. All this is subject to the caveat that the Court has the power to correct obvious mistakes where it is clear from the document itself and the background or context that something has gone wrong with the language. The power was recognised by Lord St Leonards in *Wilson v Wilson* (1854) 5 HL Cas 40 at p. 66. It was described and applied by Lord Hoffmann in *Chartbrook*: see at [21] to [25]. It has been described as a principle of interpretation or construction. It is subject to two stringent conditions which must be satisfied, which were expressed by Brightman LJ in *East v Pantiles (Plant Hire) Ltd* (1981) 263 EG 61 as follows:

“Two conditions must be satisfied: first there must be a clear mistake on the face of the instrument; secondly it must be clear what correction ought to be made in order to cure the mistake… In Snell's Principles of Equity 27th ed p 611 the principle of rectification by construction is said to apply only to obvious clerical blunders or grammatical mistakes. I agree with that approach. Perhaps it might be summarised by saying that the principle applies where a reader with sufficient experience of the sort of document in issue would inevitably say to himself, “Of course X is a mistake for Y”.”

1. Lord Hoffmann endorsed these conditions in *Chartbrook*, subject to making clear that context and background can be resorted to, as well as the terms of the instrument, in determining whether there has been a clear mistake.
2. Lord Hoffmann also said that the principle was not separate from the exercise of construction but an aspect of it. Whether that is conceptually so is a matter for debate. For my part I would agree with what Nugee LJ said in *Monsolar IQ Ltd v Woden Park Ltd* [2022] 2 P & CR 10 at [25] that this is in principle a different exercise from that of choosing between rival interpretations. The latter is seeking to give effect to the language used; whereas the power to correct a mistake operates to replace the language in order to give effect to a meaning which the language in the instrument will not bear. It is only necessary to resort to the *Chartbrook* principle if the iterative process of construction cannot achieve the desired interpretation of the language used by the parties as a permissible meaning of the wording. That is how it was approached by Mr Railton on behalf of the Republic in this case. He argued that the One-Off construction was the true construction of the Adjustment Provision properly applying the iterative process which assessed the language against the commercial and economic consequences of the rival arguments. His reliance on the power to correct mistakes was put forward as a separate alternative argument. But it does not ultimately matter whether the exercise is treated as a separate one or an aspect of a single process of construction. Where it is invoked, as it is in the alternative by the Republic in this case, it is necessary to address it.
3. As to the first condition, in *Monsolar* Nugee LJ considered the authorities, which draw a distinction between a result which is commercially unattractive or even unreasonable, and the higher threshold necessary to fulfil the condition of a clear mistake. He concluded that the condition has been expressed in slightly different language in the various authorities but is one which is clear in its concept: what is required is that the result achieved by giving the words used their meaning in accordance with the normal iterative process of construction would be “arbitrary” or “irrational” or “nonsensical” or “absurd”. In *Bellini (N/E) Ltd trading as Bellini v Brit UW Ltd* [2024] EWCA Civ 435, Sir Geoffrey Vos MR emphasised at [19] that the principle was one addressed to “obvious clerical blunders or grammatical mistakes” in the language of Brightman LJ.

**Factual matrix evidence and extraneous material**

1. The additional material upon which Mr Railton sought to rely, and which he argued was wrongly excluded from consideration by the Judge, does not fall within the proper scope of contextual material against which the meaning of the words falls to be ascertained. It is not material of which an investor in the secondary market could reasonably have been expected to be aware when purchasing the Securities.
2. Mr Railton also took us to the 2005 Prospectus which has an example of the operation of the Adjustment Provision. He submitted that it favoured the Republic’s construction because it used the expression “at any time”, which he submitted indicated a trigger for a one-off adjustment. As I shall explain when dealing with the language of the Adjustment Provision itself, that is not the language of a trigger. I regard the 2005 Prospectus as neutral, as did the Judge; it casts no light either way on the issue of construction which has arisen.
3. The Judge’s third so called “factual matrix finding”’ was that “the intention behind the Securities was that payments would only be made when the Republic’s economy was growing at a sufficiently healthy rate and that they would not be made if the Republic’s economy was not growing”. The Judge said he based this on three presentations by Dr Guillermo Nielsen, the Republic’s Secretary of Finance between 2003 and 2005, who led the restructuring of the sovereign debt which included the Securities. They were given respectively on 22 September 2003 to a meeting of the Board of Governors of the World Bank Group and the IMF in Dubai; on 4 December 2003 to the Emerging Markets Traders Association at their annual meeting in New York; and on 27 March 2004 to a Merrill Lynch Latin American Investor Conference. Although Mr Barden’s challenge to the Judge’s finding was a little tentative, I would not regard those presentations as properly admissible as an aid to construction. Only the first was addressed specifically to existing creditors, and that only to one part and before the detailed discussions with working groups of bondholder representatives. The fact that the three presentations were published on the INDEC website would not in my view put them in the category of material of which all then creditors could reasonably have been expected to be aware. Still less could that be said of later investors on the secondary market.
4. As Mr Barden submitted, growing “at a sufficiently healthy rate” begs the question of what is taken as the comparator, which is the very issue in dispute; and both that expression, and the expression “recession”, beg the question of which base year is to be used to measure growth for that purpose. Mr Railton’s argument that the experts had agreed that, on the Claimants’ construction, the Securities would pay in a recession, and that that is inconsistent with their fundamental purpose, must be seen in this light and a clear understanding of what the experts were agreeing. I would accept that parties would not have expected the Securities to pay in a “recession” provided that what is meant by recession is negative growth in GDP in the base year measurement which they have agreed should be used for the purpose. When Dr Borensztein said that on the Claimants’ construction the Securities could require payment in a recession, that was on the basis of figures positing a 10% drop in GDP in 2004 YOBP but positing *growth* of 3.3% in 1993 YOBP. Dr Buiter agreed with his proposition illustrated on this basis. That begs the question of construction whether the measurement of GDP is to be tied to 1993 prices: it was also agreed between the experts that, on the Claimants’ construction, the Securities would *not* require payment unless, and save to the extent that, payment would be required by growth of GDP measured in 1993 YOBP. The objection by the Republic that this is not measuring recession in the ‘real’ economy is to an extent met by the answer that nor is measurement in 2004 YOBP, which is already 9 years old by 2013.
5. Moreover Dr Buiter described the figures used by Dr Borensztein to illustrate the possibility as “extreme hypotheticals” and it is easy to see why. Dr Borensztein posits a 10% fall in growth in 2004 YOBP, and calculates that it results in a base case adjustment, on the Claimants’ construction, of minus 10.1%, just exceeded by the Actual Real GDP Growth of minus 10%, so that the Growth Condition is met. However in order to do so he has to posit, as I have said, a growth in GDP for the same year in 1993 YOBP of 3.3%, which he then uses in the calculation for the adjustment of the base case GDP on the Claimants’ construction. That assumes a difference of 13.3% in the growth for the same year measured in the two different series, which according to the tables provided by Mr Davies for all years going back to 1950 is greater than any divergence for measurement in different series for any of those years by a factor of almost four, none involving a divergence of more than about 3½%.
6. There is a further category of extraneous material relied upon by the Claimants, which is not factual matrix evidence, and not suggested to have been reasonably available to the parties at the time the Securities were issued or bought by investors in the market. It is relied on as showing that qualified and respected commentators contemplated that GDP-linked bonds would have some or all of the features which arise on the Claimants’ construction, which the Republic seeks to characterise as having no commercial sense or as irrational. In particular:
	1. A paper was issued by Dr Borensztein and Dr Mauro in 2004 seeking to “revive the case for countries to insure against economic growth slowdowns by issuing bonds indexed to the rate of growth of GDP”. Addressing potential concerns which investors might have about data revisions, the authors suggested that their recommendation would be “to ignore data revisions after a certain point: establish that coupon payments for each date *x* are based on GDP as estimated on date *y*”. This recognised that one solution to concerns about data revision, indeed the preferred solution, would be to measure growth by reference to GDP in an outdated base price.
	2. A paper of 8 July 2004 by the White House Council of Economic Advisers to the US President proposed a similar model of measuring growth by reference to GDP in an outdated base price as one of a number of possibilities. It went on: “Changes to statistical methodologies could be handled by requiring governments to keep separate GDP series calculated with old methodology, even after adopting a new technique for other purposes, until outstanding contracts reach maturity.” This suggests that there is nothing very surprising or uncommercial in a construction of the Adjustment Provision which would require the Republic to publish figures in 1993 YOBP for the lifetime of the Securities.
	3. Both these points were also made in a 2006 paper by Ms Griffith-Jones, the expert appointed by the Republic in the earlier stages of the proceedings before being replaced; and in a 2010 paper prepared by a debt management consultant, Michele Robinson, for the Commonwealth Secretariat.
7. When the dispute about the stance taken to the Securities by the Republic arose in 2014, Dr Nielsen said in a series of tweets that he thought the Securities should pay because the adjusted Base Case GDP growth for 2013 was about 1.38%, rather than the 3.22% implicit in the unadjusted table. He repeated this in an article in La Nación. This was explicitly on the basis that the Adjustment Provision operated in the way for which the Claimants contend, as he agreed in cross-examination at the trial. The Republic pointed out that he was by this stage no longer a member of the government, but that is no reason to doubt that this represented his genuine view as to how the provision operated, and there was no suggestion to the contrary in his evidence at trial. Mr Railton accepted that this was a relevant piece of evidence in relation to his argument that the Claimants’ construction is not one which anyone would sensibly have wanted to adopt. To my mind it is a powerful piece of evidence undermining this aspect of his argument, addressed to the commercial and economic consequences of the construction advocated by the Claimants. It is difficult to describe the construction as uncommercial, still less irrational or absurd, when it is the interpretation by Dr Nielsen, someone with unquestioned relevant economic expertise, and a full, indeed perhaps unrivalled, understanding of the background to the instrument and its genesis and purpose.

**Continued availability of data in 1993 YOBP**

1. I find it convenient here to address the question of the availability of GDP in 1993 YOBP for the duration of the Securities, because it formed part of Mr Railton’s arguments of construction at various stages. He submitted that the parties cannot have expected that the Republic would keep publishing obsolete figures, which was unheard of anywhere in the world, and that the Adjustment Provision has to be workable without such data. Accordingly they could not have intended to tie the operation of the Securities to GDP in 1993. He also submitted that the Adjustment Provision must be referring to the Overlap Year because that was the last year in which the data would be available to apply the fraction, using as it does a denominator expressed by reference to 1993 constant prices.
2. I am not persuaded by these arguments. It was common ground at the trial, and Mr Railton accepted before us, that there must be an implied term in the Securities that the Republic is required to publish such data as is necessary for the Securities to be operable in accordance with their express terms. So much is obvious. The Securities contain no express term requiring publication of anything. But clearly the Republic must publish GDP data in a constant price base year. Were it to change to a different method of measurement such as chain linking, which is what the UK and US use for GDP measurement, it would need to publish data in the form necessary to operate the Securities. The question is what data would the provision on its true construction require? That gives content to the implied term, which is that such data will be published. The issue of construction is not driven by what will be available, because it is implicitly agreed that whatever is necessary will be available. Put another way, the implied term which it is agreed exists means the parties *would* therefore expect the continued publication of GDP in 1993 constant prices if upon a true construction what they have agreed in the Adjustment Provision requires the use of such data.
3. It might be otherwise if the publication of such data was so disproportionately difficult or expensive that it could not reasonably be contemplated. But that is not this case: publishing such data would not be unduly difficult or expensive. The extraneous material to which I have referred shows that respectable commentators did contemplate that GDP-linked securities might require the government to publish data in old constant prices after a rebasing for the duration of the instruments. It is not, perhaps, very surprising that none have in fact done so, given the comparative rarity of GDP-linked securities. Mr Railton argued that the literature contemplated an express requirement to maintain such data, but that does not meet the fallacy in his underlying premise which is that the parties cannot have contemplated it being required even by an implied term.
4. All turns, therefore, on the exercise of construction without any pre-supposition that 1993 constant price figures will be unavailable. The Republic’s approach is, as Ms Prevezer put it, to allow the publication tail to wag the substantive dog.

**The language of the Adjustment Provision.**

1. I address first the language of the Adjustment Provision before addressing the arguments on economic and commercial consequences, but in doing so I have taken the arguments on the economic and commercial consequences into account.
2. I agree with the Judge and Ms Prevezer’s submissions that the meaning of the words is clear and that they bear the Annual Adjustment construction meaning. The language is simply irreconcilable with the Republic’s construction.
3. The introductory words “at any time” describe a state of affairs, not an event. Mr Railton treated them as meaning “when”, or “on”, but that one-off concept is inconsistent with the language “at any time”. This language makes clear that the provision is not concerned with a trigger event but what is to happen *whenever* GDP is no longer measured in 1993 YOBP. That occurs every year after a first rebasing and the Adjustment Provision addresses itself to an adjustment in each year because each year fulfils the introductory condition for its application. The words “at any time” are used in this same sense in the definition of Year of Base Prices where they apply to *every* year in which the new base price year is used, after a rebasing, and feed into the definition of Actual Real GDP which will be in the new YOBP for *each* year after the rebasing in which the new YOBP is used.
4. That is reinforced by the references in the numerator and denominator to “such” Reference Year, which in each case naturally means the year which is referred to in the condition at the beginning of the proviso which requires the adjustment to be made, namely the Reference Year in which GDP is no longer being measured in 1993 YOBP. It is a Reference Year in which the new YOBP is applied. The Republic’s construction, however, treats “such” Reference Year as referring to an Overlap Year, a year which has not previously been mentioned in the provision, and which is not one in which “the Year of Base Prices employed by INDEC [is] a calendar year other than 1993”. On the contrary the Overlap Year is measuring GDP in 1993 YOBP.
5. Mr Railton argued that the reference must be to the Overlap Year because it was the last year for which 1993 YOBP data would be available, and the first year which would need to be adjusted in order to enable growth to be measured in the first year in which the new YOBP was being used. Quite apart from the fact that this does not give meaning to the word “such” in the numerator and denominator, because the Overlap Year is not previously identified in the provision, this argument suffers from two further flaws. First, it assumes that no data in 1993 YOBP will be available after the Overlap Year, which is a false premise upon which to construe the provision for the reasons I have explained. Secondly, the Overlap Year is only one of a number of years which might logically have been chosen if it was desired to make a one-off adjustment at the time of rebasing. It might logically have been 2004, as the year of the new YOBP when the scope was closest to the state of the economy in that series. It might have been a year midway through the use of the old series, or the average of a combination of years. It might have been the first rebasing year, rather than the previous Overlap Year. The particular year or series of years chosen as the comparator matters because different choices would produce different adjusted figures and therefore affect the operation of the Level Condition. If the provision were intended to be a one-off adjustment, there is in truth nothing in the wording which identifies which year or years out of a range of possibilities should be used to make the adjustment.
6. Mr Railton referred to the Adjustment Provision applying a “fixed fraction” but it does no such thing in the sense in which he used it. It is true that it produces a fixed number whenever it is applied. But it plainly is not fixed in the sense of applying only a single numerator and denominator, because both are expressed in annually variable terms by reference to the Actual Real GDP from year to year.
7. The last indication in the language used, perhaps the clearest of all, is that the denominator is expressed “in constant 1993 prices”. That is so for the lifetime of the Securities and if “at any time” GDP is no longer published in constant 1993 prices. It applies in the case of a second and subsequent rebasing, which the parties would have contemplated during the lifetime of the Securities. On a second and subsequent rebasing the One-Off construction requires one not merely to ignore these words, but to rewrite them as a reference to the prices in the immediately preceding rebasing. So if a second rebasing from 2004 YOBP into 2015 YOBP occurred, “constant 1993 prices” would have to mean “constant 2004 prices”. And on a further rebasing it would have to mean “constant 2015 prices”. Mr Railton suggested that that could be achieved by way of an implied term, but it is trite that one cannot imply a term which is inconsistent with the express terms. In truth, if this result is to be achieved it can only be by way of rewriting the provision on an application of the *Chartbrook* principle in order to correct an obvious mistake.
8. The Republic’s redundancy argument does nothing to undermine this conclusion. It is not an argument that if the Adjustment Provision were deleted, the result would be the same. It plainly would not, because the effect of rebasing into 2004 YOBP is that the inflation element alone results in much higher real GDP. So much is common ground. What the Republic’s argument amounts to is that the same result as that achieved by the Annual Adjustment construction could have been achieved without adjusting the Base Case GDP chart on a rebasing if, but only if, other parts of the Securities had been worded differently. The rewording suggested by the Republic involves not only deleting the Adjustment Provision, but also amending the definition of Actual Real GDP and Actual Real GDP Growth. This is simply an argument that the same result could have been achieved by different drafting, which goes nowhere. Moreover the suggested alternative involves defining Actual Real GDP as GDP measured in constant 1993 prices as published by INDEC, rather than what would be published by INDEC after a rebasing which would be GDP in the new YOBP. One can readily understand that the draftsperson would have wanted to start with the definition actually used, which reflected real GDP as published by the Republic, rather than the suggested redefinition, which would not aptly be described after a rebasing as either “actual” or “real” GDP and would not be GDP as published by INDEC for its headline GDP for the year. The Republic’s argument is that the result achieved by the Annual Adjustment construction could be achieved by a different form of drafting which itself would be confusing and potentially misleading. It does nothing to assist the Republic’s case on construction.

**The economic and commercial consequences**

1. I have no doubt that the commercial and economic consequences of the Republic’s one-off construction make it one which the parties could sensibly have chosen. Indeed I recognise that those consequences might be regarded in a number of respects as preferable to those which follow from the Annual Adjustment construction. But I am far from being persuaded that those which flow from the Annual Adjustment construction are ones which the parties cannot be taken to have intended, because, as Mr Railton put it, no sensible person would want to achieve that result. A consideration of the economic and commercial consequences of the rival arguments does nothing to support a conclusion that the provision is to be interpreted in a way which is contrary to the plain meaning of the language used.
2. In this connection Ms Prevezer made essentially six points. The first is that the Annual Adjustment construction is economically logical in applying revised growth rates to the base chart annually, because different series are non-linear in their effect. The Base Case GDP chart growth rates are in 1993 series and when a different series is used for Actual GDP, which imports different growth rates in Actual GDP from those which would apply in a different series, it is logical to apply the same difference in growth rates to the other side of the comparator, the adjusted Base Case GDP, so as to be comparing like with like. That applies to every year in which the new YOBP is used. Mr Railton criticised this as an analysis which simply flowed from the Claimants’ desired construction; and placed impermissible weight on the figures in the GDP Base Case chart being described as in constant 1993 pesos when they were in reality figures whose essential characteristic was the fixed growth percentages which were not the product of any assumptions about base price, and only happened to be expressed in 1993 constant prices because that was the base price year in use at the time. However, to my mind this does not meet the point, which is that there is an economic logic in changing the base case growth proportions to ones which would apply in the new YOBP series if the comparator, real GDP, is being measured in the new series, which will have different growth proportions and trends because a change in series is not linear. The chart in constant 1993 prices may have used fixed percentages to produce the yearly figures, but those percentages will nevertheless necessarily be different if expressed in a new YOBP. An adjustment for each year, to compare like with like, is logical. Dr Buiter, the Claimants’ expert, explained in his evidence that this made it a more plausible solution than that proposed by the Republic. On any view it is one which reasonable readers of the provision in the parties’ shoes might treat as a good reason for adopting an annual adjustment approach, given that Dr Buiter’s expertise and good faith is not impugned.
3. Ms Prevezer’s second point is that the Claimants’ construction preserves the bargain and provides certainty because its effect is, as the experts agreed, that both the Level Condition and the Growth Condition will be satisfied at a new YOBP if and only if they are satisfied in 1993 YOBP. By contrast the One-Off construction, she submitted, “moves the goalposts”. Mr Railton criticised the argument as question-begging and conclusory, assuming what it set out to prove. The bargain is only preserved if the bargain was the Claimants’ construction of the provision, and the One-Off construction only had goalposts in a different place in the sense that it produced a different result from that produced on the Claimants’ construction. This is a valid criticism.
4. There is force, however, in Ms Prevezer’s third point, which is that the Republic’s construction is arbitrary. It resets the table once for the remaining duration of the Security (until a further rebasing) triggered by the choice of which year to use as the rebasing year and by reference to the preceding year, the Overlap Year. That is arbitrary in two respects. The first is in the Overlap Year being used as the comparator. A different result would be achieved, for that duration, if instead of the Overlap Year a different year or series of years were used as the comparator, namely the YOBP year itself (2004), or an average of previous years, or the first rebasing year (2013), any of which would be more or at least equally logical. It is also arbitrary because it fixes the adjusted base case levels in a way which will differ according to the happenstance of the timing of the introduction of the new YOBP. So in this case, the Republic having published the first three quarterly figures for 2013 in 1993 YOBP, and having the data available to do so for the fourth quarter, might have published the annual GDP for 2013 in 1993 YOBP and made 2014 the first year in which to publish quarterly and annual figures in 2004 YOBP. Had it done the latter, it would have resulted in payment being due for 2013.
5. Ms Prevezer’s fourth point was to build on her third, by an argument of moral hazard, namely that holders would not want to put their entitlement under the Securities at the mercy of a choice of when to introduce the new rebasing by the Republic, which could manipulate the choice to minimise its payments, and had a history, as she put it, of not being a model economic performer.
6. Mr Railton had several answers. The first was that the moral hazard would be met by the implied term that the Republic could not exercise any function for improper purposes or in a way which was irrational, arbitrary or capricious (*Braganza v BP Shipping Ltd* [2015] UKSC 17 [2015] 1 WLR 1661). I would agree that the *Braganza* implied term would reduce the moral hazard, but not that it would eliminate it. It only constrains improper, capricious, arbitrary or irrational choices, not those amongst a range of permissible options which is selected on the grounds of self-interest. If the methodology for a new YOBP is completed during the course of a year, the Republic might choose to publish its annual figures for that year in the new YOBP notwithstanding that quarterly figures had been published in the old YOBP, or wait until the following year to publish both quarterly and annual figures in the new YOBP. Choosing a year in which to introduce new YOBP between two such candidates could take account of the effect on available revenues, which the operation of the Securities would affect. Whether or not that is accurately described as a moral hazard, it is nevertheless a hazard which investors could sensibly and rationally have wished to avoid having an effect on the rebased chart for a lengthy period.
7. Mr Railton also relied on the expert evidence of Dr Buiter that generally countries would wish accurately to state their GDP rather than underestimate it. This is not, however, a complete answer as to whether investors would be prepared to trust the Republic to do so given its economic history; and nor would it be the only consideration relevant to the choice which arises when the new YOBP methodology becomes available mid-year.
8. Ultimately Mr Railton submitted that this consideration paled into insignificance by comparison with the economic and commercial consequences of the Claimants’ construction. I disagree. The moral hazard is a real and significant reason why investors might not have wanted to adopt the consequences of the One-Off construction.
9. Ms Prevezer’s fifth point was that the One-Off construction breaks the proportional link between changes in Actual Nominal GDP and changes in the Payment Amount, whereas the Annual Adjustment construction preserves it. As the Judge explained at [224], the One-Off Construction can create a scenario in which the level and growth rate of Actual Real GDP and Actual Nominal GDP all go up in a given year but the Payment Amount goes down, or vice-versa. Mr Railton accepted that this was so mathematically, by reference to the definitions, but submitted that that did not provide any economic justification for the Claimants’ construction; it was simply the concomitant of tying performance to the 1993 constant prices for which there could be no sensible justification. All it tells you, he submitted, is that after a rebasing the Republic is paying something proportionately different, on the One-Off construction, from what it would pay without the rebasing; but it is not telling you anything about whether the rebased economy is doing better or worse than the 1993 measure. Ms Prevezer submitted that this was nevertheless economically significant and a reason why parties might have wanted to adopt the Annual Adjustment solution because of the economic consequences the Judge identified, which were common ground between the experts. I agree with Ms Prevezer and the Judge.
10. Ms Prevezer’s sixth point was to meet Mr Railton’s submission that tying the Securities to 1993 constant pricing for the entire duration of the Securities made no commercial sense. Mr Railton asked, rhetorically, why any investors would want to tie themselves to measuring growth in GDP for 30 years by reference to an outdated and obsolete base price methodology which over that time would become further and further removed from the true economy and a decreasingly reliable measure of it, and thereby be excluded from the benefit of economic growth in the real economy which is not caught by the 1993 measurement. He referred to a book published by a Mr Williamson in 2017 making the point that no one would want to do so. Mr Williamson’s status and credentials are not apparent, but the point does not depend upon his promotion of it: its reasoning speaks for itself.
11. Against that, Ms Prevezer submitted that there is nothing uncommercial in parties tying themselves to “the devil they know” in 1993 YOBP pricing. She drew an analogy with UK inflation linked gilts, measured by reference to the Retail Price Index, which remain so linked despite the inflation measure used by the Government changing to what it regards as an improved measure of inflation, the Consumer Price Index. Although she did not develop this reasoning, it captures the point that on any view the Securities involve the use of an out of date scope, the extent of which depends on the Republic’s choice of when to rebase. There will always, therefore, be an imperfect link between growth in the ‘true’ economy in a given year, and measurement of that growth by reference to out of date scope of an old base price year. In 2012 GDP was measured in 1993 scope which was almost 20 years out of date. Other approaches to measuring GDP are available. However for so long as the Republic uses a GDP measurement based on historic constant prices, as the Securities envisage it will, the declared GDP will always be based on an out of date scope which might, if it could be rebased in current scope, reveal greater or lesser growth. Whether over the life of the Securities, or in any particular year, the investors and the Republic will do better or worse if it remains the first out of date scope (1993) or a later out of date scope (2004 from 2013 onwards) is impossible to judge in advance.
12. Professor Hubbard’s description of the Securities as “loosely tied to the macro economy” needs due weight to be given to the looseness of the connection. The point the Republic makes was articulated by Professor Hubbard as “no reasonable investor would want a security linked to a previous economy”. But that is what the Securities undoubtedly do by reflecting the Republic’s practice of using a historic constant price year to measure current GDP. The question becomes which “previous economy” they might choose.
13. The proof of the pudding that the Claimants’ approach is not uncommercial lies in the extraneous literature to which Mr Barden took us, comprising respectable opinion that parties to GDP-linked securities might want to tie themselves to a measure which was no longer the YOBP used by the country; and Dr Nielsen’s view that this is what the parties achieved (and implicitly intended to achieve) in this case by the Adjustment Provision.
14. Turning to the Republic’s submissions on the commercial and economic consequences of the rival arguments, I have summarised in paragraph 51 above the main points made by Mr Railton. I have already addressed most of them in the course of the earlier parts of this judgment, giving some counterbalance to the weight which the Republic seeks to put upon them. Two remain to be addressed, namely that based on the availability of funds or sustainability; and that based on certainty.
15. The Judge’s second element of factual matrix was expressed as follows:

“… the fact that the Securities were issued against the background of a major economic crisis in Argentina which had been caused by an inability to keep up with debt repayment since I accept, in essence, that the fundamental purpose of the Securities was to ensure the sustainability of payments for the Republic to stabilise its financial position and prevent another default.”

1. Mr Railton relied on the second half of this passage to support an argument that the commercial consequences of the Annual Adjustment construction, in tying the bonds to the 1993 economy, was fundamentally inconsistent with the availability and sustainability purpose there found. This argument has some force, but not as much as Mr Railton sought to give it. The Judge was describing the purpose of the Securities in general terms (“in essence”). In using a base price year they necessarily require, in any given year, payment in current Euros out of nominal GDP of an amount based on performance of the economy measured in an old year’s base price. How old depends upon how when rebasing takes place. In 2012 GDP was still being measured in 1993 YOBP which was almost 20 years out of date as a reflection of the make-up of Argentina’s economy. It would have been possible for the measurement in constant 1993 prices to show healthy growth of more than 3% but that measured in up to date constant prices, notionally 2012 YOBP if it existed, to show a mild recession (as the illustrations of the non-linear effect of different series demonstrate). That would not fulfil an availability or sustainability purpose. The equivalent might be true for any year between 2005 and 2012; and of GDP for 2013 and the following years measuring the economy in 2004 constant prices which was already 9 years out of date at the beginning of the rebasing cycle. The link, therefore, between the availability of funds in the real economy and the measurement of GDP is, by the terms of the Securities, a weak one. Mr Railton was able to submit, correctly, that the connection with available funds in the current economy, and therefore sustainability, became weaker still on the Claimants’ construction because the further one got from the base price year being used, the greater the degree of disconnection between the measurement of GDP in that base year and the true economy, which was what generated funds from tax revenues. To that extent it is a good point.
2. As to certainty, on the Claimants’ construction the adjusted Base Case GDP cannot be calculated until after the relevant year when full year Actual GDP is published, and holders could not therefore know in advance what published GDP would trigger a payment and how much. Mr Railton is right that the Republic’s construction gives a greater degree of certainty in advance as to what GDP must be achieved in a given year to meet the Growth and Level Conditions, because the adjusted base case table remains fixed for the duration of each rebasing. However the certainty involved in the One-Off construction is a qualified one. It gives no such certainty for the year in which the rebasing is introduced, as the events of 2013 in this case illustrate. Nor does it do so for any year which might reasonably be anticipated as one in which the Republic *might* rebase, even if it does not do so. For example, the Republic announced that it anticipated concluding the 2004 rebasing work by 2009. From the holders’ point of view, therefore, 2009, 2010, 2011, 2012, and 2013 were each years in respect of which they did not have the certainty which Mr Railton invokes, on the Republic’s construction, as to what Base Case GDP would be being used as a comparator for Actual Real GDP, because those might have been rebasing years triggering an adjustment.

**Conclusion on the iterative process of construction**

1. Standing back, and taking account of the Republic’s points on the economic and commercial consequences of the rival constructions, I accept that, taken cumulatively, they provide a coherent body of reasons why the One-Off construction is one which the parties could sensibly have chosen. In a number of respects the consequences of the Republic’s construction might be regarded as preferable to those which follow from the Claimants’ construction. But it goes no further than that. There are also coherent reasons why the parties might sensibly have chosen the Annual Adjustment construction. The language in which they expressed their bargain clearly shows that they chose the latter.

**The *Chartbrook* principle**

1. The Republic’s argument does not fulfil the first condition of the *Chartbrook* principle of there having been an obvious mistake. The arguments about commercial and economic consequences do not come close to the threshold of rendering the Claimants’ construction arbitrary, absurd, irrational or nonsensical, for the reasons I have given.
2. Nor would the Republic’s case meet the second condition, even if it met the first and a one-off adjustment were obviously what was intended As I have explained, in that eventuality using the ‘Overlap Year’ as that which is used to rebase the Base Case GDP chart for the duration of the subsequent years in which that rebased YOBP is used, is merely one of a number of years, or combination of years, which might have been chosen to make the adjustment, including the new YOBP year itself (2004 in this case), the first year using the rebased YOBP (2013 in this case) or a combination of years used to provide an average. Each would produce a different adjustment to the Base Case GDP chart, affecting the operation of the Level Condition.

**The Republic’s alternative case: the Hubbard Deflator construction**

1. The Claimants’ construction of the expression in the denominator “Actual Real GDP for such Reference Year measured in constant 1993 prices” is that this is the Actual Real GDP in 1993 YOBP. The Republic contends (as an alternative to its main construction arguments) that after a rebasing the denominator requires two steps. Actual Real GDP has to be taken as the first step, and because of the definition of YOBP this is GDP in 2004 YOBP; the second step is an adjustment required by the words “measured in constant 1993 prices” which requires a stripping out of the effect of price inflation in the rebasing (but not the effect of the scope/methodology changes); the deflator proposed by Professor Hubbard, it is said, achieves this objective.
2. The Judge described the Republic’s argument on this point as “hopeless”. I would regard that as a little harsh because, to my ear, at least, Mr Railton’s submissions lent it an initial superficial attraction. However, I agree with the Judge that it is wrong. That is for three principal reasons.
3. First and foremost the two-step approach is not what the language of the Securities envisages. Where a base price year is used, as Professor Hubbard and Mr Davies agreed in their joint statement, real GDP is measured in constant prices. That is a measurement which imports the scope and methodology of the base price year, not merely the prices or values attributed to the different elements in the basket, because that is what is necessary to make it a constant in a way which enables growth to be measured using like with like. That is reflected in the language of the Securities. Actual Real GDP is the GDP “measured in constant prices for the Year of Base Prices.” If the YOBP is 1993, the Actual Real GDP is GDP “measured in constant prices for [1993]”, which is the same as the expression used in the denominator of the Adjustment Provision “measured in constant 1993 prices”. Both require the constant price year, the base year, the YOBP, to be utilised which involves the scope and methodology of that base year to represent a constant, not simply one element of it, namely the monetary value put on the various aspects of the basket which make up its scope. The essential fallacy in the Hubbard Deflator construction is to treat the word “prices” in the expression “measured in constant 1993 prices” as meaning something distinct from “constant prices”, and confined merely to price in the lay sense of the monetary value of goods and services; whereas the provision clearly uses “prices” as part of the concept of “constant prices”, a concept which is not limited to the monetary value of goods and services, but, as the experts agreed, includes the entire scope and methodology of the year of constant prices identified.
4. Secondly, Professor Hubbard’s deflator does not do what the Republic says it is doing, namely simply stripping out the effects of inflation by reference to INDEC published data. It is apparent both from Professor Hubbard’s report itself, and the INDEC table he references as the one which he used, that the figures reflect the effect of inflation in 2004 on the 1993 real GDP *measured in 1993 constant prices*. It is therefore a measure identifying the price inflation in the basket of goods and services comprising the 1993 base price year scope, and the methodology applied to that basket. It is not a measure of what has happened to price inflation between 1993 and 2004 in relation to the different basket of goods and services in the revised 2004 YOBP, which is what the Republic’s argument seeks to treat it as being so as to deflate GDP in 2004 YOBP. To be fair to Professor Hubbard, he never suggested it was, and this deflator was devised by him as one way of addressing an issue of quantum, not by way of construction of the Adjustment Provision. Accordingly even if the Adjustment Provision required a two-step approach, the second of which was to strip out price inflation from 1993 to 2004 for GDP expressed by reference to 2004 YOBP, with its 2004 scope and methodology, the Hubbard Deflator does not purport to do this but distorts it. This distortion would be even greater in the case of multiple rebasings, in which the Hubbard deflator would have to be applied in successive stages, the first being a deflator from the second rebasing year in which Actual Real GDP was now expressed, 2015 in my earlier example, to 2004; and then from 2004 to 1993. At both stages the figure used would not be a measure of price inflation for the basket and methodology of the base year to which it was being applied.
5. Thirdly, the provision says nothing about how a deflator is to be calculated or used for the purposes the Republic suggests was intended. This would be a construction giving rise to uncertainty, and a surprising omission in an Instrument which has taken care to define a GDP Deflator which is to be used for other purposes.

**Conclusion**

1. For these reasons, which in large part reflect those given by the Judge, I would dismiss the appeal.

 **LADY JUSTICE FALK :**

1. I agree.

**LORD JUSTICE LEWISON :**

1. I also agree.

 **Annex 1**

**Payment**

Subject to the provisions contained herein, THE REPUBLIC OF ARGENTINA (the “Republic”), for value received, hereby promises to pay … the Payment Amount (as defined in Paragraph 1(e) of the Terms and Conditions set forth on the reverse hereof (the “Terms”)) in accordance with the Terms. The Payment Amount, if any, shall be payable on December 15 of each year following the relevant Reference Year (as defined in Paragraph l(e) of the Terms) (each, a "Payment Date"), commencing on December 15 2006 and terminating no later than [the earlier of 15 December 2035 or the Payment Cap being reached]

**Payment Conditions**

Clause 2 (b) Notwithstanding anything to the contrary hereunder, Holders of this Security shall not be entitled to receive any payment pursuant to this Security in respect of any Reference Year unless (i) Actual Real GDP for such Reference Year is greater than Base Case GDP for such Reference Year, (ii) Actual Real GDP Growth for such Reference Year is greater than Base Case GDP Growth for such Reference Year, and (iii) the aggregate amount of all payments made by the Republic hereunder, when added to the amount of such payment, does not exceed the Payment Cap.

**Definitions**

"Actual Nominal GDP" means, for any Reference Year, an amount equal to Actual Real GDP for such Reference Year multiplied by the GDP Deflator for such Reference Year.

"Actual Real GDP" means, for any Reference Year, the gross domestic product of Argentina for such Reference Year measured in constant prices for the Year of Base Prices, as published by INDEC.

"Actual Real GDP Growth" means, for any Reference Year, the percentage change in Actual Real GDP for such Reference Year, as compared to Actual Real GDP for the immediately preceding Reference Year; *provided* that*,* if the Year of Base Prices employed by INDEC for determining Actual Real GDP for such Reference Year and for the immediately preceding Reference Year shall differ, then Actual Real GDP for the immediately preceding Reference Year shall for this purposes be measured using constant prices for the Year of Base Prices applicable to the Reference Year in respect of which Actual Real GDP Growth is being determined.

"Available Excess GDP" means, for any Reference Year, an amount in Argentine pesos equal to (i) 5%of Excess GDP for such Reference Year, *multiplied* by (ii) the Unit of Currency Coefficient.

"Base Case GDP" means, for any Reference Year, the amount set forth in the chart below for such year:

|  |  |  |  |
| --- | --- | --- | --- |
| Reference Year | Base Case GDP (in millions of constant 1993 pesos) | Reference Year | Base Case GDP (in millions of constant 1993 pesos) |
|  |  |  |  |
| 2005 | 287,012.52 | 2020 | 458,555.87 |
| 2006 | 297,221.54 | 2021 | 472,312.54 |
| 2007 | 307,369.47 | 2022 | 486,481.92 |
| 2008 | 317,520.47 | 2023 | 501,076.38 |
| 2009 | 327,968.83 | 2024 | 516,108.67 |
| 2010 | 338,675.94 | 2025 | 531,591.93 |
| 2011 | 349,720.39 | 2026 | 547,539.93 |
| 2012 | 361,124.97 | 2027 | 563,965.88 |
| 2013 | 372,753.73 | 2028 | 580,884.85 |
| 2014 | 384,033.32 | 2029 | 598,311.40 |
| 2015 | 395,554.32 | 2030 | 616,260.74 |
| 2016 | 407,420.95 | 2031 | 634,748.56 |
| 2017 | 419,643.58 | 2032 | 653,791.02 |
| 2018 | 432,232.88 | 2033 | 673,404.75 |
| 2019 | 445,199.87 | 2034 | 693,606.89 |

*provided* that, if the Year of Base Prices employed by INDEC for determining Actual Real GDP shall at any time be a calendar year other than the year 1993, then the Base Case GDP for each Reference Year shall be adjusted to reflect any such change in the Year of Base Prices by multiplying the Base Case GDP for such Reference Year (as set forth in chart above) by a fraction, the numerator of which shall be the Actual Real GDP for such Reference Year measured in constant prices of the Year of Base Prices, and the denominator of which shall be the Actual Real GDP for such Reference Year measured in constant 1993 prices.

"Base Case GDP Growth" means, for any Reference Year, the percentage change in Base Case GDP for such Reference Year, as compared to Base Case GDP for the immediately preceding Reference Year, *except that,* solely for purposes of determining Base Case GDP Growth for the Reference Year 2005, the Republic shall assume a Base Case GDP for the year 2004 equal to Ps. 275,276.01 (in millions of constant 1993 pesos).

"Excess GDP" means, for any Reference Year, the amount (expressed in billions of Argentine pesos), if any, by which Actual Nominal GDP for such Reference Year exceeds the Nominal Base Case GDP for such Reference Year. All calculations necessary to determine Excess GDP based on the information published by INDEC will be performed by the Ministry of Economy (as defined below), and such calculations shall be binding on the Trustee, the Registrar, the trustee paying agent and each other trustee paying agent and all Holders of this Security, absent bad faith, wilful misconduct or manifest error on the part of the Ministry of Economy.

"GDP Deflator" means, for any Reference Year, the number that results from dividing (i) the gross domestic product of Argentina for such Reference Year measured at the current prices of such Reference Year, as published by INDEC, by (ii) the Actual Real GDP for such Reference Year.

"Nominal Base Case GDP" means, for any Reference Year, an amount equal to Base Case GDP for such Reference Year multiplied by the GDP Deflator for such Reference Year.

"Payment Amount" means, for any Payment Date, an amount equal to (i) the Available Excess GDP (converted into euro) for the Reference Year corresponding to such Payment Date, multiplied by (ii) the notional amount of this Security outstanding as of such Payment Date; *provided* that, if for any Payment Date, the Payment Amount determined in accordance with the foregoing would, when added to all prior Payment Amounts paid by the Republic hereunder, exceed the Payment Cap, the Payment Amount for such Payment Date shall instead be an amount equal to the Payment Cap *minus* the sum of all such prior Payment Amounts. The Payment Amount shall be determined by the Ministry of Economy on the Calculation Date preceding the relevant Payment Date. All calculations made by the Ministry of Economy hereunder shall be binding on the Trustee, the Registrar, the trustee paying agent and each other trustee paying agent and all Holders of this Security, absent bad faith, wilful misconduct or manifest error on the part of the Ministry of Economy.

"Reference Year" means any calendar year from and including the year 2005 to and including the year 2034.

"Year of Base Prices" means the year 1993; *provided* that if the calendar year employed by INDEC for purposes of determining Actual Real GDP shall at any time be a calendar year other than the year 1993, then the Year of Base Prices shall mean such other calendar year.