

Reporting for hyperinflationary economies

June 2023

Contents

Ab	out this publication	2
	What is hyperinflation and how to identify it	3
	What are the challenges of hyperinflationary accounting?	3
	What are the challenges for a parent with subsidiaries which are required to apply hyperinflationary accounting?	4
	Application of hyperinflationary accounting – a practical example	5
	Step 1: Restate opening statement of financial position	6
	Step 2: Restate closing statement of financial position	8
	Step 3: Restate statement of profit or loss and OCI	9
	Step 4: Calculate gain or loss on net monetary position	9
	Hyperinflation accounting and deferred income tax balances	11
	When does the application of hyperinflationary accounting cease?	12



About this publication

The purpose of this publication is to assist you in understanding the accounting and reporting requirements under International Financial Reporting Standards as adopted by the European Union (IFRS) and the implications for the finance function of entities operating in hyperinflationary economies under IFRS.

Generally, guidance under Dutch GAAP is less detailed compared to IFRS. This is also the case for the interpretative guidance on hyperinflation accounting. As a result, Dutch GAAP reporters will – in general – align their accounting policies with IFRS. In our view the approach as explained in this publication can be applied when reporting under either Dutch GAAP or IFRS.

Hyperinflationary accounting under IAS 29 – Financial Reporting in Hyperinflationary Economies – applies to a number of entities for the interim and annual reporting periods ending on or after 31 December 2022.

Hyperinflationary accounting under IAS 29 is relevant for the:

- 1. financial statements of entities reporting under IFRS Standards whose functional currencies are those of hyperinflationary economies; and
- consolidated financial statements of groups reporting under IFRS Standards with foreign operations (e.g. a subsidiary, associate or joint arrangement) whose functional currencies are those of hyperinflationary economies.

IAS 29 is applied from the beginning of the reporting period in which the entity identifies hyperinflation.

Entities that report under IFRS Standards are responsible for monitoring inflation in the countries that they operate in and for performing in the first instance their own assessment of the applicability of IAS 29.

If you have an entity that operates in countries with a hyperinflationary economy or has foreign operations in those countries, then please consider IAS 29 carefully and consult with your advisor as necessary.

Lawrence de Waal

Capital Markets Accounting Advisory Services KPMG Netherlands

Ivo van Amelsfoort

Capital Markets Accounting Advisory Services KPMG Netherlands



© 2023 KPMG Accountants N.V., a Dutch limited liability company and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in the Netherlands.

What is hyperinflation and how to identify it

Hyperinflation is a term to describe rapid, excessive, and out-of-control general price increases in an economy. In general, a long-term inflation rate of around 2% is seen as a healthy inflation rate. Inflation rates above 2% are considered high inflation¹. Hyperinflation is an extreme case of inflation, it is not just a high inflation rate. Hyperinflation can cause several adverse consequences, one of which would be hoarding behavior. Therefore, hyperinflation can cause a surge in prices for essential goods as demand outpaces supply.

As hyperinflation is considered an extreme economic state, under International Financial Reporting Standards ('IFRS'), a specific standard has been developed: IAS 29 – Financial Reporting in Hyperinflationary Economies ('IAS 29'). An entity is required to apply this standard to both consolidated and separate financial statements, if its functional currency is the currency of a hyperinflationary economy. The standard does not establish an absolute rate at which hyperinflation is deemed to arise; it rather indicates that it is a matter of judgment and requires management to assess whether the economy is considered hyperinflationary. Hyperinflation is indicated by the characteristics of an economy which include but are not limited to the following (IAS 29.3):

- The general population prefers to keep its wealth in non-monetary assets or in a relatively stable foreign currency – amounts of local currency held are invested immediately to maintain purchasing power.
- The general population regards monetary amounts not in terms of the local currency but in terms of a relatively stable foreign currency prices may be quoted in the stable currency.
- Sales and purchases on credit take place at prices that compensate for the expected loss of purchasing power during the credit period, even if the period is short.
- Interest rates, wages and prices are linked to a price index.
- The cumulative inflation rate over three years is approaching or exceeds 100%.

What are the challenges of hyperinflationary accounting?

Reporting for hyperinflation has many challenges. For instance, restatements of financial statements, making non-standard calculations and assessing the monetary and non-monetary assets on an individual basis.

When an entity's functional currency is hyperinflationary (which means it is the currency of a hyperinflationary economy), its financial statements are 'restated' so that all items are presented in the measuring unit current at the reporting date – i.e. it adopts the current purchasing power concept. Moreover, when an entity has foreign operations (e.g. a subsidiary, associate or joint arrangement) whose functional currency is the currency of a hyperinflationary economy, the investee's financial statements are restated before being translated and included in the investor's financial statements.

To prepare a statement of financial position and a statement of profit or loss and other comprehensive income ('OCI') in a hyperinflationary economy, an entity needs to determine the impact of changes in purchasing power and to restate its comparatives. To prepare these statements, there are four separate steps to be considered:

- Step 1: Restate the statement of financial position at the beginning of the reporting period.
- Step 2: Restate the statement of financial position at the end of the reporting period.
- Step 3: Restate the statement of profit or loss and OCI for the reporting period.
- Step 4: Calculate and separately disclose the gain or loss on the net monetary position. (IAS 29.8-10)

¹ https://www.federalreserve.gov/faqs/5D58E72F066A4DBDA80BBA659C55F774.htm



It is important to note that restatement for hyperinflation is not elective.

There will also be impacts on the statement of changes in equity and the statement of cash flows from this process.

What are the challenges for a parent with subsidiaries which are required to apply hyperinflationary accounting?

Financial reporting of entities that have activities in hyperinflationary economies may be impacted, depending on the structure of these activities.

For financial reporting purposes an entity has to identify its functional currency (IAS 21.8). This is the currency of the primary economic environment in which it operates. In addition to the functional currency, the reporting currency has to be identified (IAS 21.8). The reporting currency is the currency in which the financial statements are presented. Especially within larger companies there can be a difference between the functional currency and the reporting currency for entities within the group. The reporting currency will often be determined by the parent entity, while each of the subsidiaries should determine their functional currency.

In general, IAS 29 requires an entity to consider the functional currency of the activities that occur in the hyperinflationary economy. As long as the functional currency is not that of a hyperinflationary economy, IAS 29 would not be applicable.

However, if the functional currency is that of an economy deemed to be a hyperinflationary economy, then IAS 29 is applicable.

It is important to note that the reporting currency is not the determining factor with respect to application of IAS 29.

The table below summarizes the reporting implications:

Functional currency	Reporting currency	In scope of IAS 29?	Comparative figures
Hyperinflationary	Hyperinflationary	Yes	To be adjusted
Hyperinflationary	Non-Hyperinflationary	Yes	Accounting policy choice
Non-hyperinflationary	Hyperinflationary	No	No adjustments

The presentation currency has implications for the financial reporting of the parent entity. When the financial information of an entity or foreign operation whose functional currency is hyperinflationary is translated into a different presentation currency, this is done in accordance with IAS 21. Whether comparative amounts are restated depends on whether the presentation currency itself is hyperinflationary or non-hyperinflationary.

For example, a subsidiary has a functional currency that is identified as hyperinflationary, and for statutory purposes it uses the same currency as reporting currency. Based on the requirement of IAS 29, the comparative figures should then be restated as if IAS 29 has always been applied (IFRIC 7.3).

In light of a foreign operation it is important to note that IAS 29 is applied at the level of the foreign operation before any translation is made to the presentation currency of the parent.

For the parent entity, of which part of its operations are identified to be in the functional currency of a hyperinflationary economy (those of the subsidiary), but for which the reporting currency is that of a non-hyperinflationary economy, there are different options available regarding the application of IAS 29. The



comparative amounts are not restated for changes during the current reporting period in either the general price level in the functional currency (i.e. as would otherwise be required by IAS 29) or the exchange rate between the functional and presentation currencies. As such, the comparative amounts remain those amounts reported as current for the previous reporting period (IAS 21.42-43, 29.8, 34). Either the entity can follow the adjustments as reported by the subsidiary – in other words: as if IAS 29 has always been applied – or they can adjust only the current year financial reporting.

Application of hyperinflationary accounting – a practical example

Example - restatements to reflect purchasing power at reporting date

Company H was incorporated in December 2020 with a cash capital contribution of 100, and started its operations in 2021:

- In December 2021, H bought a piece of land for 600, and entered into a five-year loan. The land is measured at cost.
- In October 2022, H bought inventories, which remained unsold on 31 December 2022.
- H's functional currency has been considered hyperinflationary since 2020.

The following table shows a general price index of the economy in which H operates, on specified dates:

Price index at:	
31 December 2020	100
31 December 2021	150
31 October 2022	180
31 December 2022	200
Average price index during 2022	175

Statement of financial position before IAS 29 restatement	Historical purchasing pow	
	31 Dec 2022	31 Dec 2021
Share capital (contributed on 31 December 2020)	100	100
Retained earnings	1,050	800
Total equity	1,150	900
Land (acquired on 31 December 2021)	600	600
Investment securities held for trading	250	150
Inventories (acquired on 31 October 2022)	100	-
Trade receivables	500	200
Cash	100	350
Loan payable	(400)	(400)
Net assets	1,150	900



Statement of profit or loss and OCI before IAS 29 restatement				
	2022			
Revenue	1,150			
Gain on change in fair value of investment securities	100			
Interest on loan payable	(100)			
Other expenses	(900)			
Net result	250			

Step 1: Restate opening statement of financial position

The statement of financial position as at 31 December 2021 (1 January 2022) is restated so that it is expressed in the measuring unit current as at 31 December 2022. H can apply one of the following approaches.

- **Approach 1:** Restate the historical statement of financial position at the beginning of the reporting period:
 - non-monetary items in the statement of financial position as at 31 December 2021 are multiplied by the change in the index from the date the non-monetary items were acquired or contributed to 31 December 2022; and
 - monetary items as at 31 December 2021 are multiplied by the change in the index from 31 December 2021 to 31 December 2022 (1.33 = 200 / 150).
- Approach 2: Multiply all assets and liabilities reported in the hyperinflationary statement of financial position as at 31 December 2021 (i.e. as restated for changes in the price index to 31 December 2021) by the change in the index from 31 December 2021 to 31 December 2022 (1.33 = 200 / 150). (IAS 29.34)

This example does not include any income taxes. If H applies Approach 1, in order to determine the opening balance of the deferred tax it would need to follow the separate methodology to calculate deferred income tax (see page11). Therefore, it will be more practical to apply Approach 2 by which H can simply restate all the assets and liabilities including deferred tax items in its opening statement of financial position by applying the change in the price index during the current reporting period:



Statement of financial position as at 1 January 2022 (using Approach 2)

	31 Dec 2021 historical purchasing power	31 Dec 2021 reported in prior period ⁽¹⁾	1 Jan 2022 expressed in 31 Dec 2022 purchasing power (2)
Share capital (contributed on 31 December 2020)	100	150 ⁽³⁾	200
Retained earnings	800	750 ⁽⁴⁾	1,000
Total equity	900	900	1,200
Land (acquired on 31 December 2021)	600	600	800
Investment securities held for trading	150	150	200
Inventories (acquired on 31 October 2022)	-	-	-
Trade receivables	200	200	267
Cash	350	350	467
Loan payable	(400)	(400)	(534)
Net assets	900	900	1,200

Notes

- 1) As included in the 2021 hyperinflationary financial statements.
- 2) As restated for inclusion as comparatives / opening position in the 2022 financial statements. All assets and liabilities are adjusted to be expressed in 31 December 2022 purchasing power. All amounts are calculated by multiplying the corresponding figures in the statement of financial position as at 31 December 2021 as reported in the prior period by the change in the price index during 2022 (i.e. 200 / 150).
- Share capital contributed in 2020, calculated as historical purchasing power amount multiplied by change in price index from the date of contribution on 31 December 2020 to 31 December 2021 (as (150 / 100) x 100).
- 4) Restated retained earnings are a balancing figure derived from the other amounts in the restated statement of financial position.



Step 2: Restate closing statement of financial position

The statement of financial position as at 31 December 2022 is restated so that it is expressed in the measuring unit current at that time. Non-monetary items – i.e. share capital, land and inventories – are restated from their acquisition or contribution date. The investment securities held for trading are not restated, because they are stated at fair value at the reporting date. Monetary items – i.e. trade receivables, cash and the loan payable – as at 31 December 2022 are not restated, because they are already expressed in purchasing power at that date. (IAS 29.12, 14-15, 18)

Statement of financial position as at 31 December 2022					
	31 Dec 2022 historical purchasing power	31 Dec 2022 expressed in 31 Dec 2022 purchasing power			
Share capital (contributed on 31 December 2020)	100	200 ⁽¹⁾			
Retained earnings	1,050	1,161 ⁽²⁾			
Total equity	1,150	1,361			
Land (acquired on 31 December 2021)	600	800 ⁽³⁾			
Investment securities held for trading	250	250			
Inventories (acquired on 31 October 2022)	100	111 ⁽⁴⁾			
Trade receivables	500	500			
Cash	100	100			
Loan payable	(400)	(400)			
Net assets	1,150	1,361			

Notes:

- 1) Share capital contributed in 2020, calculated using the change in the index from 31 December 2022 (as (200 / 100) x 100).
- 2) Restated retained earnings are a balancing figure derived from the other amounts in the restated statement of financial position. The increase reflects the net result for the period, which includes the monetary loss of 125 (see Step 4).
- 3) Land bought at end of 2021, calculated using the change in the index from 31 December 2021 to 31 December 2022 (as (200 / 150) x 600).
- 4) Inventory bought in October 2022, calculated using the change in the index from 31 October 2022 to 31 December 2022 (as (200 / 180) x 100).



Step 3: Restate statement of profit or loss and OCI

Income and expenses recorded in the statement of profit or loss and OCI are restated to reflect changes in the price index from the date on which they are recorded initially in the financial statements. In this example, an average index is applied.

Statement of profit or loss and OCI	31 Dec 2022 historical purchasing power	Restatement	31 Dec 2022 expressed in 31 Dec 2022 purchasing power
Revenue	1,150	165	1,315 ⁽¹⁾
Gain on change in fair value of investment securities	100	14	114 ⁽²⁾
Interest on loan payable	(100)	(14)	(114) ⁽³⁾
Other expenses	(900)	(129)	(1,029) ⁽⁴⁾
Profit before gain or loss on net monetary position	250	36 ⁽⁶⁾	286
Loss on net monetary position (see Step 4 for calculation)	-		(125) ⁽⁵⁾
Net profit	250		161

Notes

- 1) Revenue calculated using average index for 2022 (i.e. (200 / 175) x 1,150).
- Gain on change in fair value of investment securities calculated using average index for 2022 (i.e. (200 / 175) x 100).
- 3) Interest on loan payable calculated using average index for 2022 (i.e. (200 / 175) x 100).
- 4) Other expenses calculated using average index for 2022 (i.e. (200 / 175) x 900).
- 5) See calculation in Step 4.
- 6) Restatement of items in the statement of profit or loss and OCI.

Step 4: Calculate gain or loss on net monetary position

The gain or loss on the net monetary position can be:

- derived as the difference resulting from the restatement of non-monetary assets, owners' equity and items in the statement of profit or loss and OCI and the adjustment of index-linked assets and liabilities (Approach 1); or
- estimated by applying the change in the general price index to the weighted average for the period of the net amounts of monetary assets and liabilities (Approach 2).



Approach 1: Difference from restatement of non-monetary items

Non-monetary items				
	Amount exp purchasing p		Expressed in purchasing power at 31 Dec 2022	Difference resulting from the restatement
Restatement of non-monetary assets				
Land	Dec 2021	600	800	200
Inventories	Oct 2022	100	111	11
Restatement of owner's equity				
Share capital	Dec 2021	(150)	(200)	(50)
Retained earnings	Dec 2021	(750)	(1,000)	(250)
Restatement of items in the statement of profit or loss and OCI				(36)
Loss on net monetary position (used in Step 3)				(125)

Approach 2: Effect on the net monetary amounts

- Calculate the gain/loss on holding monetary items in the statement of financial position at the beginning of the reporting period based on the purchasing power as at 31 December 2022.
- Adjust the above amount for the effect of net monetary transactions that occurred during 2022 by comparing the restated carrying amounts to the historical transaction amounts.

Loss on net monetary position	1 Jan 2022	Net change in monetary items		31 Dec 2022
		Related to transactions during 2022	Related to transactions in Oct 2022	
Investment securities held for trading	150	100	-	250
Trade receivables	200	300	-	500
Cash	350	(150)	(100)	100
Loan payable	(400)	-	-	(400)

Loss on net monetary position	1 Jan 2022	Net change in monetary items		1 Jan 2022 Net change in m	31 Dec 2022
		Related to transactions during 2022	Related to transactions in Oct 2022		
Net monetary position at historical purchasing power	300	250	(100)	450	
Net monetary position at December 2022 purchasing power	400 ⁽¹⁾	286 ⁽²⁾	(111) ⁽³⁾	575 ⁽⁴⁾	
Loss on net monetary position	(100)	(36)	11	(125)	



Notes

- 1) Calculated by applying the change in the price index from that of December 2021 to that of December 2022 i.e. ((200 / 150) x 300).
- 2) Calculated by applying the difference between the average price index of 2021 and that of December 2022 i.e. ((200 / 175) x 250).
- 3) Calculated by applying the change in price index from that of October 2022 to that of December 2022 i.e. ((200 / 180) x 100).
- Theoretical amount that net monetary assets and liabilities would have been if the historical amounts had maintained their purchasing power in line with changes in the price index – i.e. (400 + 286 – 111).



Hyperinflation accounting and deferred income tax balances

Deferred income tax balances are calculated after the restatement of non-monetary items and require particular consideration under IFRS. An entity calculates deferred tax balances in the opening statement of financial position applying the following methodology:

- Remeasure the carrying amounts of non-monetary items by applying the measuring unit current at the date of the opening statement of financial position – i.e. by indexing up for the change in the price index from the date of acquisition or subsequent revaluation to the date of the opening statement of financial position;
- Measure deferred tax at the date of the opening statement of financial position in accordance with IAS 12 based on those revised carrying amounts; and
- Remeasure those deferred tax balances for the change in the measuring unit from the date of the
 opening statement of financial position to the reporting date i.e. by indexing up for the change in the
 price index during the reporting period (IFRIC 7.4).



When does the application of hyperinflationary accounting cease?

When an entity's functional currency ceases to be hyperinflationary, it discontinues preparing and presenting its financial statements in accordance with IAS 29 for reporting periods ending on or after the date on which the economy is identified as being non-hyperinflationary. The amounts expressed in the measuring unit current at the end of the last reporting period in which IAS 29 was applied are used as the basis for the carrying amounts in subsequent financial statements. Judgment is required in determining when the economy ceases to be hyperinflationary. (IAS 29.38)

Key takeaways

Key Takeaways for Challenges in Hyperinflationary Reporting:

- Time-Consuming Nature: Hyperinflationary reporting involves time-consuming complexities, such as determining appropriate accounting policies and collecting relevant data.
- Complex Calculations: Restating financial statements in a hyperinflationary environment typically follows a four-step approach for each reported year. These calculations should strictly follow methodology in order to adjust for the effects of inflation accurately.
- Data-Intensive Process: Hyperinflationary reporting requires extensive calculations on a per-asset and per-transaction basis. The volume of data involved can make the reporting process more complex and time-consuming.

In summary, hyperinflationary reporting presents challenges in terms of restating financial statements, performing non-standard calculations, and individually assessing assets. Addressing these challenges is crucial for accurate and meaningful financial reporting in hyperinflationary economies.



Contact us

Lawrence de Waal KPMG Accountants N.V. Capital Markets Accounting Advisory Services T +31 (0)20 656 8665

E dewaal.lawrence@kpmg.nl

Ivo van Amelsfoort KPMG Accountants N.V. Capital Markets Accounting Advisory Services T +31 (0)20 656 8664 <u>E</u> vanamelsfoort.ivo@kpmg.nl

http://kpmg.nl/nl

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

© 2023 KPMG Accountants N.V., a Dutch limited liability company and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. Printed in the Netherlands.