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# DEGI Research - Real Estate FOCUS



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## Inflation and real estate: a janus-faced combination?

A phantom is going around in Europe: no, this is not about political signs, moreover, we are dealing with something that you cannot see directly, let alone touch, but still causes many to groan at the supermarket checkout or the petrol station. Inflation has been contained for a long time, occasionally being declared dead but is currently identified as the new bogeyman. In addition, the world economy is simultaneously burdened by an accumulation of stress factors; starting with the continued finance or subprime crisis, accompanied by the crash of share prices, followed by increasing costs of energy, food and building materials. This melange causes what analysts call a clouding over of the economic climate. Growth perspectives can only be found in Asia and in the emerging markets. First analysis results show the mood in financial markets is worsening rapidly, the risk aversion of investors and market volatility has increased considerably. Real Estate holds the only classic set up for investments.

Especially in times of high inflation rates – in July 2008 German inflation was the highest in 15 years at 3.3% – the preference for tangible assets or the strategy to invest in real estate are recommended as they are considered fundamentally stable economic assets. Generally, the value of real

estate rises analogically to the inflation as long as supply and demand remain stable and other influences are ignored. But does this still compare to reality? Does real estate after subprime have a comeback as protection against inflation? Since the onset of the subprime crisis, real estate has lost its image as a flagship investment. But this “value slump” is regional (see USA, Great Britain and Spain) and segment specific (residential property) and does not have global general validity. The current business conditions for the Western real estate markets are altogether stable.

Current market conditions give rise to some important questions - Which stable investment possibilities are available with regard to inflation and can these give security and inflation resistance? Also important is the question of whether open real estate funds can profit from inflation in the form of nominal profit increases after a price drop of property shares.

The current Real Estate Focus is meant as a discussion approach, to indicate the advantages of direct and indirect real estate investment in times of a rising inflation. However, there are still considerable research deficits with regard to the theoretical inflation causes. “Inflation and real estate” are apparently a janus-faced combination. Janus is the God of doors and gates, entries and exits. Let us look behind that door.



### Definition of “inflation”

The word inflation (from the Latin inflare meaning to inflate) is an expression for price increases in all goods categories and therefore buying power decreases. To measure inflation, selected price indexes (generally consumer price index) are used. According to the rate of inflation development or the extent of the price increase, we distinguish between creeping (up to appr. 7% p.a.), running and galloping (from appr. 20% p.a.) inflation. With regards to inflation causes and types, there is a general distinction between supply and demand factors.

- In **demand inflation**, the increase of price levels results from demand exceeding the macroeconomic supply. This causes a value adjustment between supply and demand quantities; the inflationary gap is closed.
- In **supply inflation**, we distinguish between cost-push inflation (resulting from company efforts to pass on increased costs to the consumer via prices, e.g., wages, commodities and/or tax) and profit-push inflation which occurs when companies have freedom in their pricing due to lack of competition.
- The focus of the current inflation genesis is a novel view: **imported inflation** will cause an inflation transfer from abroad (e.g. price increase for oil)<sup>1</sup>.

Inflation can be viewed as a worldwide problem as there have only been occasional temporary consumer price decreases in individual countries. If there have been benefits in recent years from the slowing effect of globalisation on inflation – and there was an easy conclusion that inflation was therefore dead – now high energy and food prices plus the rising demand from emerging markets lead to higher and imported inflation. This is followed by a price increase that cannot be reconciled with the stability goal. The current inflation is accompanied by a considerable shift of exchange rates between the most important currencies of the world economy.

The return of inflation presents new challenges to the monetary policies in industrial states, especially Germany. It was clear in the past that it was not only important for the central banks to control the money supply: more important is what happens with the money. The money supply grows or shrinks depending on the economy and how people are investing their money.

### Theses to “concrete gold”: real estate as inflation protection – the theory

Real estate is considered, like gold, as inflation protection. Compared to other investment forms, particularly shares, the actual value of real estate should not decrease even with a strong rise in prices. This particular attribute can be explained academically. The prices and rents for real estate should react positively to rising inflation rates for various reasons as shown below.

The rents for commercial or office properties that are linked to price indices in the form of a stable value clause are the first to stand out. A rise in inflation is reflected directly in rising rents and therefore in rising prices. In index-linked rental contracts, adjustment typically takes place annually and corresponds to the total inflation rate. Table 2 below gives an overview of the stable value clauses and the respective index in international comparison.

This shows that the consumer price index is the most common and other indices are only used sporadically. In France, for instance, the building cost index has increased so much that the state is considering creating a new index. It should also be mentioned that rental contracts contain individual agreements that can comprise caps so that the index is carried over by only 70, 80% or even 100% but only every two years. There are no signs of apprehension with regards to an incomplete rent index that will cause real estate values not to rise with the price increases. In table 3, further theses on inflation protection of real estate are introduced that show a primarily positive link between rising building costs and the value of (asset) real estate.

Table 1: Non-monetary inflation theory<sup>2</sup>

















Cause of inflation	Cost push		Demand shift		Market power	
	Wage push	Tax push	Structural shift	Terms of trade shift	Monopoly power	Administered prices
Particular inflation condition	Costs are driving prices (e.g. wage-price and price-wage spiral)		Demand shifts permanently in a certain direction (e.g. from industrial production to service industry) whereby the increased demand for certain goods drives prices but the decreased demand in other areas does not lead to price reductions.		Certain suppliers – such as private monopolists, oligopolists or the state – are able to raise prices contrary to consumer wishes.	

Source: Woll, A., Allgemeine Volkswirtschaftslehre (2003).  
DEGI Research, 2008

<sup>1</sup> see Bundesbank

<sup>2</sup> The non-monetary inflation theories search for the cause of price increases almost exclusively in the deciding factors of the actual national income. Inflation theories, especially their empirical examination, are still being developed according to professional literature.

Table 2: Stable value clauses in international comparison – selection (office market<sup>3</sup>)

Country	Applied index
 Belgium	Health Index (corresponds largely to the consumer price index, alcohol and tobacco are not considered)
 Germany	Consumer price index
 France	Building cost index (due to current high building cost inflation caps are being negotiated; the state intends to create a new index)
 Finland	Consumer price index
 Great Britain	No index (within the scope of "rent reviews" rental contracts are adjusted regularly to the market rents)
 Italy	Consumer price index (some fixed adjustments (e.g. 2.5 p.a.) are applied)
 Japan	No index (due to marginal inflation)
 Canada	No index (graduated rents possible)
 Luxemburg	Consumer price index
 Netherlands	Consumer price index
 Poland	Consumer price index
 Portugal	Consumer price index
 Romania	Consumer price index
 Sweden	Consumer price index
 South Korea	No index (graduated rental contracts are often agreed on, the graduations are generally effective every two years)
 Czech Republic	Consumer price index

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Increased inflation has made real estate a refuge of stability, more so as prices in the German property markets did not rise as much as in many neighbouring countries. Furthermore, with so little building work in most cities, a shortage of office properties in popular inner city locations for investors is emerging again.

### Concrete gold in Germany?

To determine whether the positively described theses or links exist in reality, DEGI Research investigated the connection between

inflation in Germany and the change of a real estate index as well as the value development of the German open real estate funds<sup>4</sup>. Figure 1 shows this while in table 4 the relevant correlation co-efficients are shown.

As well as the relatively high positive correlation co-efficient (> + 0.5) the diagram illustrates that inflation in the real estate sector generally lead to rising profits. For instance, the high inflation rates in the 1970s, early 1980s and in 1992 and 1993 are accompanied by the high increase of the real estate index and the

Table 3: Theses on impact of inflation on real estate

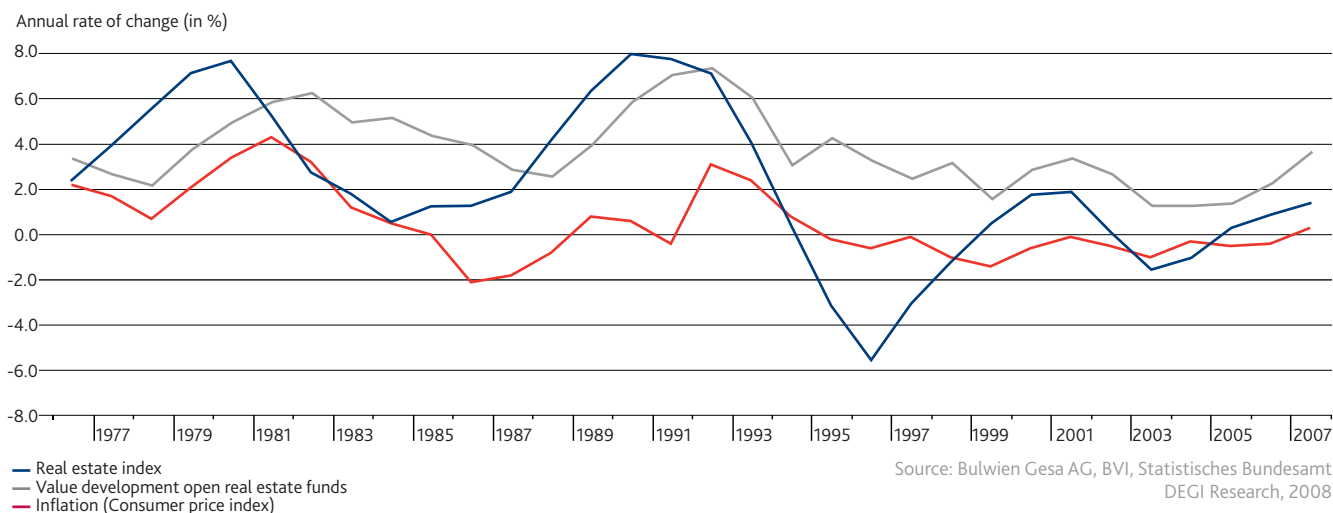
Thesis	Inflation as factor	Impact on real estate
Increasing building costs ensure market and value stability	Increasing building costs prevent over supply in the area market.	Due to added costs, profitability of new projects decreases and prevents too much new area being added to the market which will have a stabilising effect on rents and prices.
	When the costs for building a new object increase asset property becomes an alternative.	This should be reflected in increased willingness to pay and higher prices.
Owner and debtor as winner	With real estate financed at a rate of fixed interest, a rise in inflation would lead to a decrease of actual interest.	Particularly private property owners would benefit from this effect.
	Should wages rise at least at the rate of inflation and interest stays constant.	A smaller share of income has to be used for interest.

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<sup>3</sup> Rents dependent on turnover are common in the retail sector. As long as rising prices for consumer goods are not compensated by a decrease in demand, a rise in inflation will automatically lead to rising rents and therefore rising prices. An increase in returns, especially in basic need goods, is to be expected due to small price elasticity.

<sup>4</sup> The real estate index of BulwienGesa AG was applied. This considers the rent and price changes in various sectors of the German real estate market. For instance, the development of residential and land prices as well as office and retail rents are included. The real estate and consumer price indices used here refer to the old Federal States of Germany up to 1990 and from 1991 to the new German states.

Figure 1: Inflation and value development of real estate



value development of the funds<sup>5</sup>. Therefore, it can be confirmed initially that direct and indirect real estate investments in times of high inflation represent protection against depreciation. Long-term observations show that the value development of open real estate funds with an average 5.8% p.a. is considerably higher than the average inflation rate of 2.48% p.a. This emphasises their function as a security-oriented base investment within portfolio strategies.<sup>6</sup>

Table 4: Correlation co-efficients

Correlation co-efficient between inflation rate and	
Real estate price index	+ 0.54
Value development of open funds	+ 0.58

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## Conclusion

As the correlation co-efficients between inflation rate and the real estate price index and to the value development of open funds as well as show direct and indirect real estate investments generally meet the long-term requirements of the inflation protection argument and have become of greater interest, not least to diversify the investment portfolios.

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Open real estate funds are particularly suitable with regards to the present economic parameters since other investors that are financed mainly through credit capital struggle with considerable financial limitations: the banks have difficulty placing secured loans in the money market and refinancing themselves. As open real estate funds invest primarily in commercial property which are secured by stable value clauses, as inflation rises, so do rents. The stable value clauses that generally account for the lion's share in the rental contracts of an open real estate fund therefore have a dual effect on the development of real estate investment: with indexing, the annual profits increase, also the property value rises as this is calculated on a multiple annual net rent. But a short-term negative value change with increased inflation pressure can cause the higher rent income go up in smoke. It is therefore important for the total return of a direct or indirect real estate investment to consider other factors of the real estate value. Without doubt, the global power circumstances (e.g. visible in the strong growth of oil producing countries) are shifting in the environment of economic, inflation and subprime worries that ultimately complicate the controlling of monetary policy by the central banks. With a continued weakening of economic growth, a number of negative economic facts would be generated in case of a possible stagflation (inflation and economic stagnation) which would put a strain on the real estate market altogether. We consider this combination unlikely to occur at present.

<sup>5</sup> General opinion in the 1970s was that a rising inflation could be used to boost the economy and create jobs. Interest rates were lowered and the market was flooded with money. The result was rising inflation and higher rate of unemployment. In the 1980s, the central banks restricted the growth of money supply considerably to control the rate of price increases. The peak inflation rate was reached in 1992 as a result of the reunification boom.

<sup>6</sup> It should be noted that the high correlation can not be attributed monocationally to the inflation but also to other variables that are themselves linked closely and aligned with the inflation. For instance, an increase of inflation can lead to rising interest rates (and vice versa). This has a positive effect on the value development of open real estate funds through the interest from their liquid means, among others.