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History tells us

Housing markets do offer inflation protection

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We showed in March that, in Germany, house prices have kept up with inflation during periods with high inflation and that, over decades, house prices have increased even faster than consumer prices. Here, we extend the analysis to other countries.

Low interest rates during the 2010s led to a search for yield. This boosted real estate investments, which were seen as a substitute for ever lower yielding bond investments. Many investors increased their real estate quotas over the last decade and during the pandemic. The interest rate shock which kicked in at the end of 2021 hit many stock and bond markets harder than the property markets. As a result, real estate quotas moved even higher. Regulatory requirements may force institutional investors to reduce them again. Other investors may also consider realigning their portfolios as the interest rate shock has made bond investments much more attractive again, as yields might soon approach their peaks. So, there are two important factors which could weigh on demand for real estate investments.

Despite these headwinds, real estate remains attractive if inflation rates remain high as, in our view, real estate investments offer inflation protection. We think, that only under exceptional circumstances prices in the real estate market would stagnate or fall while prices in the overall economy rise sharply. Real estate is closely interwoven with the economy, representing a large share of wealth and shelter is a basic human need for any society. Finally, from a psychological perspective, material values such as real estate become more attractive if the purchasing power of money declines. It is therefore hardly surprising that in the past real estate prices very often exceeded CPI inflation by a wide margin.

The OECD provides data for housing markets, typically the largest real estate market in every country. For 16 countries, we can analyze price indices back to 1970. From 1970 to 2022 house price increases surpassed inflation in all 16 countries, quite often substantially. The range of ratios was between 1.3 in Germany (minimum) and 5.1 in the UK (maximum). Germany, Italy, Japan, and South Africa were the only countries with ratios of house price increases to inflation below 2.

We also performed the analysis for the five decades from 1970 to 2020 and for all 41 countries in the OECD data base. The result is that in 87 of 118 observations house prices increased more strongly than consumer prices. The histogram and table below provide the details. Moreover, in the 1970s,



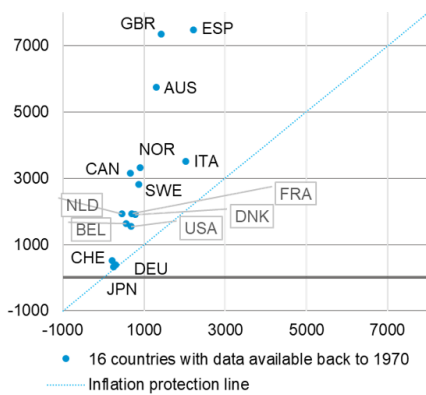
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the last decade with high inflation rates, in 14 of 16 countries house prices outperformed consumer prices.

We think this broad evidence clearly shows housing markets in general do provide inflation protection for investors. The same should hold for commercial property as in nearly all countries the commercial market is generally less regulated than the residential market, allowing for stronger price increases in times of high overall inflation.

1970-2022 House prices vs. inflation

y-axis: house price increase in %
x-axis: inflation in %

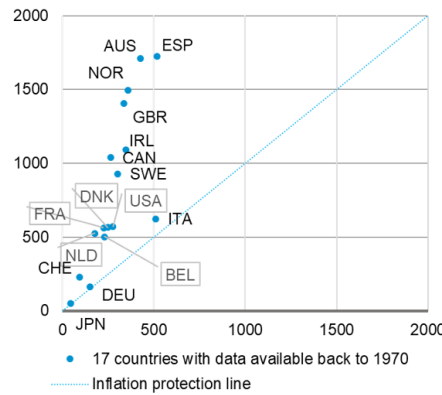


In this chart we exclude South Africa as prices increased by hundred and fifteen times. For Spain data starts in 1971.

Sources: Deutsche Bank Research, OECD

1980-2022 House prices vs. inflation

y-axis: house price increase in %
x-axis: inflation in %

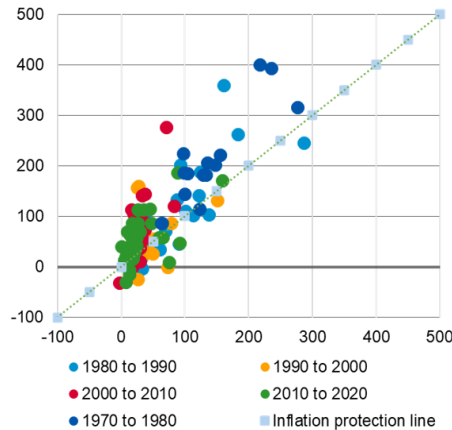


In this chart we exclude South Africa as prices increased by more than fifty times. For Spain data starts in 1971.

Sources: Deutsche Bank Research, OECD

1970-2020 House prices vs. inflation for five decades

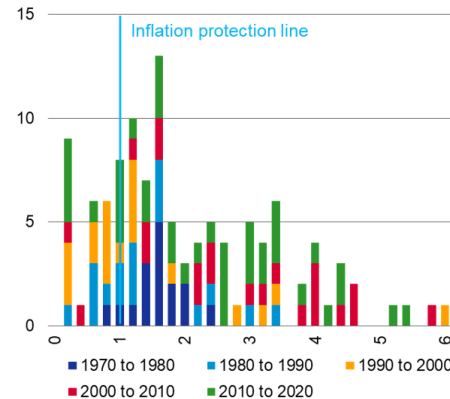
y-axis: house price increase in %
x-axis: inflation in %



Sources: Deutsche Bank Research, OECD

1970-2020 Ratio of house price increase to inflation

y-axis: no. of observations
x-axis: ratio across 5 decades



Sources: Deutsche Bank Research, OECD



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House price increases to inflation for five decades and 41 countries

Ratio	AUS	BEL	CAN	DNK	FRA	DEU	ITA	JPN	NLD	NOR	ESP	ZAF	SWE	CHE
1970 to 1980	1.44	1.89	1.80	1.37	1.52	1.40	1.84	1.37	2.29	0.94	1.14	1.13	0.74	1.43
1980 to 1990	1.52	0.56	1.53	0.51	1.10	0.57	1.43	3.21	-0.10	1.16	2.23	0.86	0.90	2.81
1990 to 2000	1.65	2.80	0.49	3.22	0.61	0.73	0.54	-1.08	5.96	3.06	1.11	0.87	0.71	-0.94
2000 to 2010	3.92	3.61	4.45	3.13	5.61	-0.07	2.89	12.48	2.06	3.93	4.26	3.90	7.32	3.22
2010 to 2020	1.78	1.42	3.69	2.46	1.40	4.16	-1.19	2.92	1.27	2.47	-0.47	0.90	5.30	85.00

Ratio	GBR	USA	IRL	PRT	COL	KOR	AUT	EUL	GRC	ISR	BRA	CHN	CZE	EST
1970 to 1980	1.67	1.44												
1980 to 1990	2.18	1.04	0.76											
1990 to 2000	1.11	1.09	6.22	1.10	0.63	-0.01								
2000 to 2010	4.52	1.28	1.48	0.37	1.46	2.02	1.15	2.20	2.40	1.25				
2010 to 2020	1.65	2.57	3.00	3.31	2.57	0.88	3.92	1.48	-4.59	7.20	0.12	2.34	2.97	4.29

Ratio	HUN	ISL	IND	IDN	LVA	LTU	LUX	MEX	POL	RUS	SVK	SVN	TUR
2010 to 2020	3.32	3.22	2.11	0.98	5.19	3.14	4.35	1.85	1.50	0.51	2.80	0.96	1.08

AUS=Australia, BEL=Belgium, CAN=Canada, DNK = Denmark, FRA=France, DEU=Germany, ITA=Italy, JPN=Japan, NLD=Netherlands, NOR=Norway, ESP=Spain, ZAF=South Africa, SWE=Sweden, CHE=Switzerland, GBR = Great Britain, IRL=Ireland, PRT=Portugal, COL=Columbia, KOR=South Korea, AUT=Austria, EUL=Euro area, GRC=Greece, ISR=Israel, BRA=Brazil, CHN=China, CZE=Czech Republic, EST=Estonia, HUN=Hungary, ISL=Iceland, IND=India, IDN=Indonesia, LVA=Latvia, LTU=Lithuania, LUX=Luxembourg, MEX=Mexico, POL=Poland, RUS=Russia, SVK=Slovakia, SVN=Slovenia, TUR=Turkey

Sources: Deutsche Bank Research, OECD

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