

Economics 442
Macroeconomic Policy

Lecture 20
4/4/2024

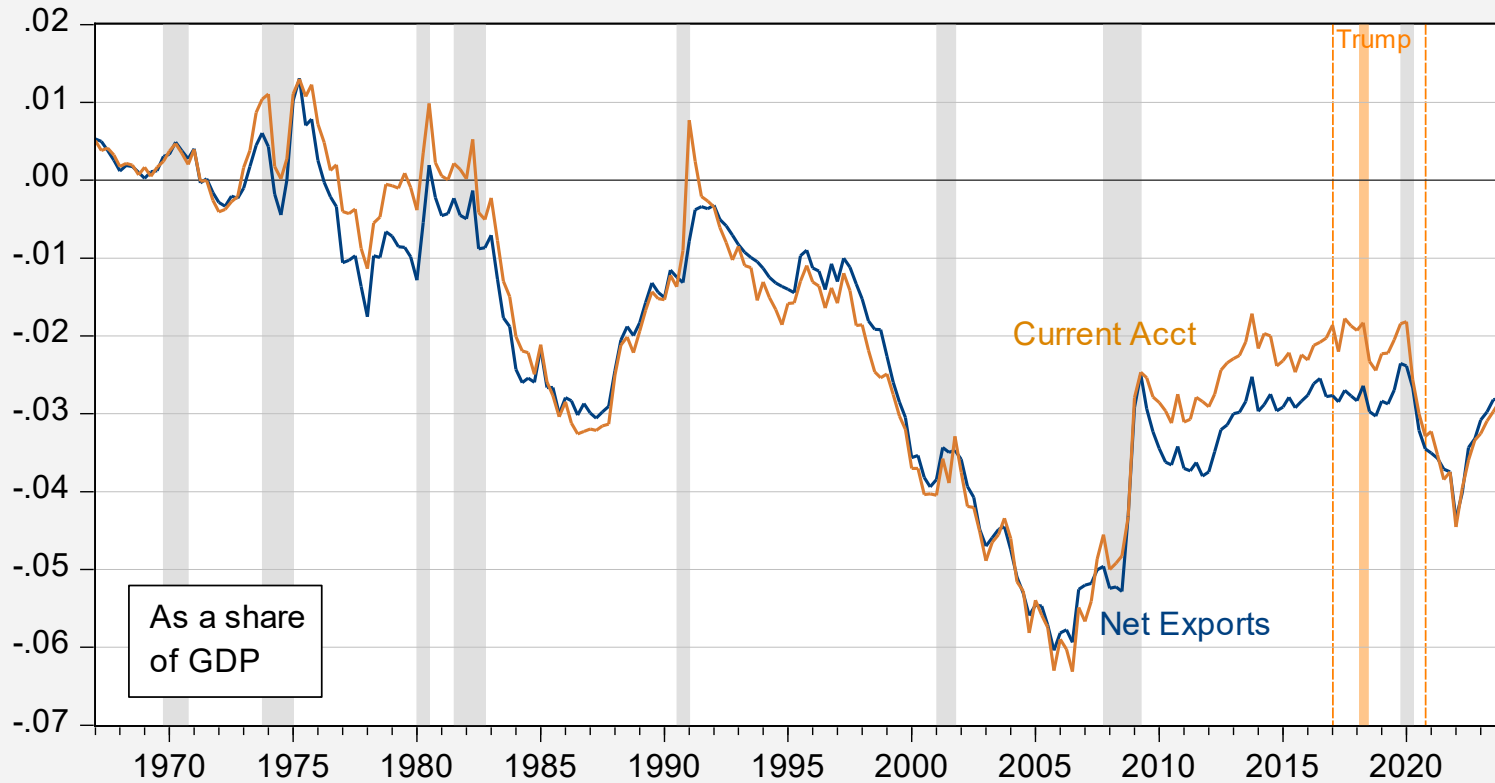
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UW Madison
Spring 2024

Trade, Deficits and Debt

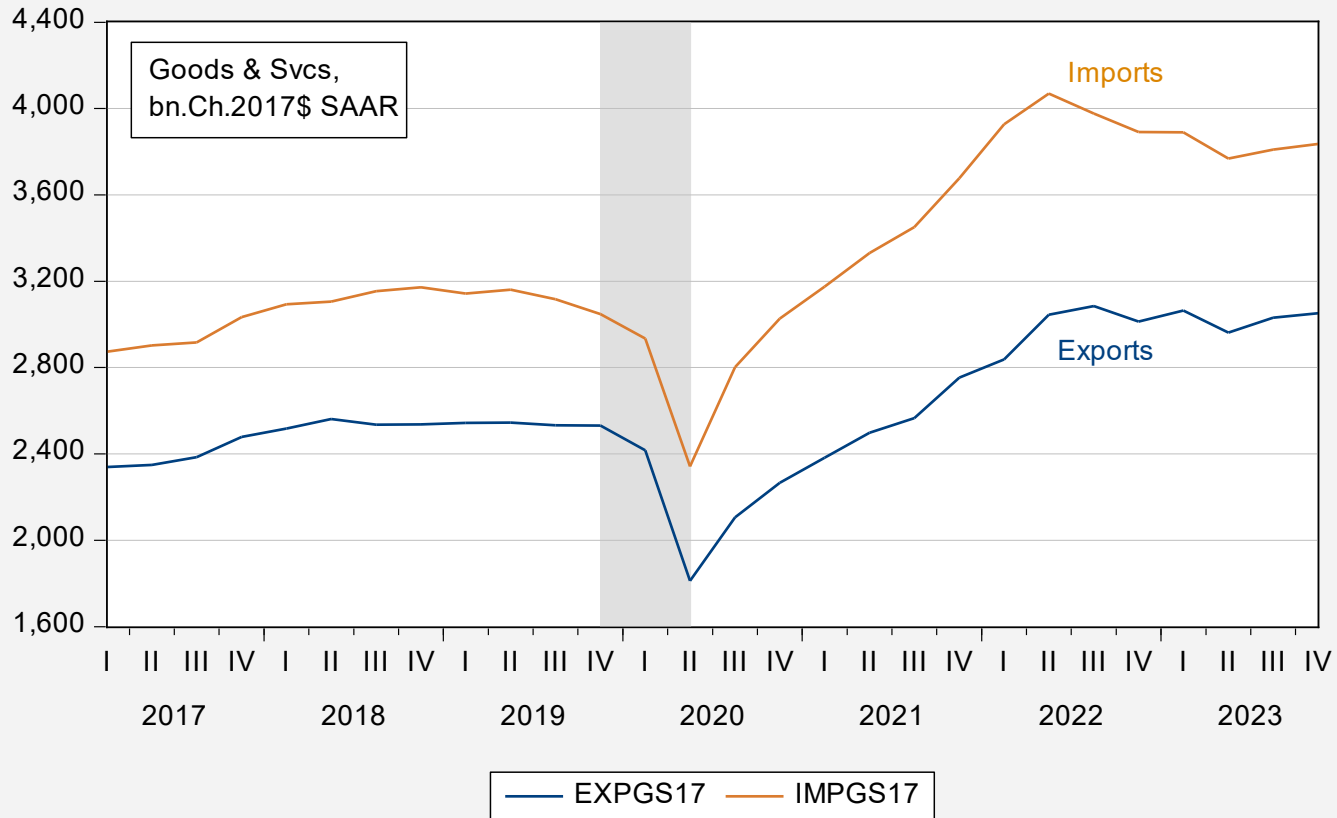
“For many, many years, the United States has suffered through massive trade deficits. That’s why we have \$20 trillion in debt. So we’ll be changing that.”

--President Donald J. Trump, June 30, 2017

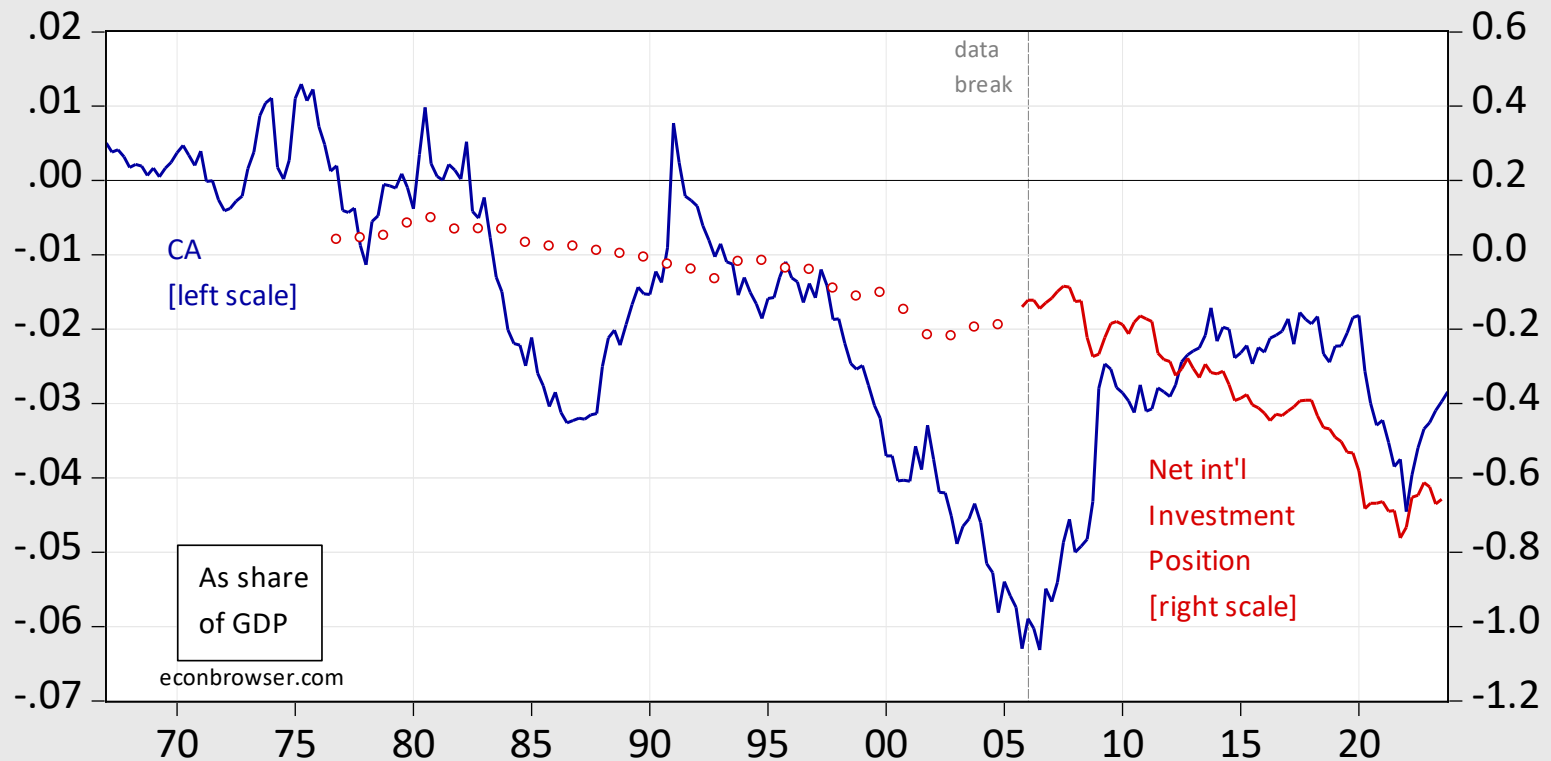
Trade & Current Account Balances



Exports & Imports



Current Account and Net International Investment Position



Accounting, Exchange Rates

- Balance of payments accounting
- Exchange rates
- Foreign exchange markets

Balance of Payments Accounting

$$CA + FA + ORT \equiv 0$$

“current a/c” “private financial a/c” “official financial a/c”

$$CA \equiv NX + NI + NT$$

“net exports” “net income” “net transfers”

$$NX \equiv EX - IM/\epsilon$$

ORT is changes in holdings of central banks, monetary authorities

U.S. Current Account

[Millions of dollars; quarterly data seasonally adjusted]

Period	Current Account ¹												Current account balance as a percentage of GDP
	Goods ²			Services			Balance on goods and services	Primary income receipts and payments			Balance on secondary income ³	Balance on current account	
	Exports	Imports	Balance on goods	Exports	Imports	Balance on services		Receipts	Payments	Balance on primary income			
2010	1,290,279	1,938,950	-648,671	582,041	436,456	145,584	-503,087	723,223	553,311	169,911	-98,834	-432,009	-2.9
2011	1,498,887	2,239,886	-740,999	644,665	458,188	186,477	-554,522	791,469	589,038	202,431	-103,211	-455,302	-2.9
2012	1,562,630	2,303,749	-741,119	684,823	469,610	215,213	-525,906	791,679	593,754	197,925	-90,134	-418,115	-2.6
2013	1,593,708	2,294,247	-700,539	719,529	465,819	253,710	-446,829	811,561	616,041	195,520	-85,545	-336,854	-2.0
2014	1,635,563	2,385,480	-749,917	756,705	490,932	265,773	-484,144	845,926	645,623	200,303	-83,978	-367,819	-2.1
2015	1,511,381	2,273,249	-761,868	768,362	497,755	270,607	-491,261	825,100	639,724	185,376	-101,470	-407,355	-2.2
2016	1,457,393	2,207,195	-749,801	780,530	511,898	268,632	-481,169	857,819	660,798	197,021	-110,716	-394,865	-2.1
2017	1,557,003	2,356,345	-799,343	830,388	544,836	285,552	-513,791	997,524	739,731	257,793	-109,272	-365,269	-1.9
2018	1,676,950	2,557,251	-880,301	862,433	562,069	300,364	-579,937	1,108,472	857,298	251,174	-120,931	-449,693	-2.2
2019	1,652,437	2,516,767	-864,331	875,825	588,359	287,466	-576,865	1,135,691	899,347	236,344	-139,705	-480,226	-2.2
2018: I	412,989	630,894	-217,905	217,360	138,310	79,050	-138,855	270,402	200,215	70,187	-27,918	-96,587	-1.9
II	426,060	630,865	-204,805	213,617	139,042	74,575	-130,230	279,752	215,258	64,494	-29,678	-95,414	-1.9
III	419,341	646,224	-226,883	215,287	140,810	74,477	-152,406	273,725	217,087	56,638	-29,473	-125,241	-2.4
IV	418,561	649,269	-230,708	216,170	143,907	72,263	-158,445	284,593	224,738	59,855	-33,861	-132,452	-2.5
2019: I	419,048	635,180	-216,133	215,162	144,267	70,895	-145,237	278,452	225,153	53,298	-34,677	-126,616	-2.4
II	411,069	635,641	-224,572	220,326	147,964	72,362	-152,210	287,535	228,069	59,467	-34,948	-127,691	-2.4
III	410,930	632,059	-221,129	219,259	147,788	71,471	-149,658	286,761	225,140	61,621	-33,556	-121,594	-2.3
IV	411,390	613,887	-202,497	221,079	148,341	72,738	-129,759	282,943	220,985	61,958	-36,524	-104,324	-1.9
2020: I	403,533	595,281	-191,748	202,019	136,747	65,272	-126,476	256,527	204,491	52,036	-37,075	-111,516	-2.1
II ^p	288,885	508,223	-219,338	155,768	101,328	54,440	-164,898	209,389	180,176	29,213	-34,856	-170,541	-3.5

Source: *Economic Indicators*, October 2020

<https://www.govinfo.gov/content/pkg/ECONI-2020-10/pdf/ECONI-2020-10-Pg36.pdf>

Financial Account

[Millions of dollars; quarterly data seasonally adjusted]

Period	Balance on capital account ¹	Financial account											Statistical discrepancy	U.S. official reserve assets, net (unadjusted, end of period) ⁴
		Net U.S. acquisition of financial assets excluding financial derivatives [net increase in assets / financial outflow (+)]					Net U.S. incurrence of liabilities excluding financial derivatives [net increase in liabilities / financial inflow (+)]				Financial derivatives other than reserves, net transactions	Net lending (+) or net borrowing (-) from financial account transactions ⁵		
		Total	Direct investment assets	Portfolio investment assets	Other investment assets	Reserve assets ⁴	Total	Direct investment liabilities	Portfolio investment liabilities	Other investment liabilities				
2010	-6,891	958,737	349,829	199,620	407,454	1,835	1,391,042	264,039	820,434	306,569	-14,076	-446,381	-7,481	132,433
2011	-9,020	492,556	436,615	85,365	-45,301	15,877	983,522	263,499	311,626	408,397	-35,006	-525,972	-61,650	147,953
2012	931	176,937	377,239	248,760	-453,522	4,460	632,034	250,343	747,017	-365,327	7,064	-448,032	-30,849	150,175
2013	-6,559	649,753	392,796	481,298	-221,242	-3,099	1,052,068	288,131	511,987	251,949	2,222	-400,093	-56,681	144,575
2014	-6,535	866,702	387,528	582,676	-99,920	-3,583	1,109,443	251,857	697,607	159,979	-54,335	-297,076	77,278	130,090
2015	-7,940	197,359	302,072	160,410	-258,831	-6,292	503,468	511,434	213,910	-221,876	-27,035	-333,144	82,151	117,581
2016	-6,606	335,233	299,814	36,283	-2,955	2,090	706,693	474,388	231,265	1,040	7,827	-363,633	37,838	117,332
2017	12,394	1,188,188	405,375	569,375	215,127	-1,690	1,546,281	366,996	790,796	388,489	23,998	-334,095	18,779	123,313
2018	-4,196	358,971	-151,298	335,263	170,017	4,989	758,291	261,480	303,075	193,736	-20,404	-419,724	34,165	125,798
2019	-6,244	440,751	188,469	46,570	201,053	4,659	797,960	351,629	179,980	266,350	-38,340	-395,549	90,921	129,479
2018: I	-1,406	320,758	-58,184	289,989	88,959	-7	446,162	65,445	301,122	79,595	29,139	-96,265	1,727	126,510
2018: II	-2,912	-223,399	-105,044	-17,704	-103,719	3,068	-135,152	9,475	-18,368	-126,259	-15,723	-103,970	-5,644	125,099
2018: III	-455	109,691	74,289	83,451	-47,872	-177	114,982	137,899	12,157	-35,075	-11,505	-16,796	108,900	123,729
2018: IV	576	151,921	-62,359	-20,473	232,649	2,105	332,299	48,662	8,164	275,474	-22,315	-202,693	-70,817	125,798
2019: I	-2,542	84,497	-11,846	-40,720	136,855	208	158,290	117,543	-18,569	59,315	-21,383	-95,175	33,983	125,175
2019: II	-848	158,966	115,561	45,025	-3,980	2,359	317,227	99,461	146,049	71,717	-9,642	-167,903	-39,364	128,338
2019: III	-835	142,221	25,574	20,460	94,305	1,882	238,964	78,119	105,660	55,185	-6,382	-103,125	19,303	127,595
2019: IV	-2,019	55,067	59,180	21,806	-26,128	210	83,479	56,506	-53,160	80,133	-933	-29,345	76,998	129,479
2020: I	-2,971	830,858	-9,065	115,814	724,354	-245	952,306	52,201	-20,547	920,653	-21,611	-143,059	-28,572	127,910
2020: II ^p	-1,052	-147,602	35,861	-29,818	-158,606	4,960	-4,777	-8,510	338,957	-335,225	60,256	-82,569	89,025	133,890

Source: *Economic Indicators*, October 2020

<https://www.govinfo.gov/content/pkg/ECONI-2020-10/pdf/ECONI-2020-10-Pg37.pdf>

Definitions

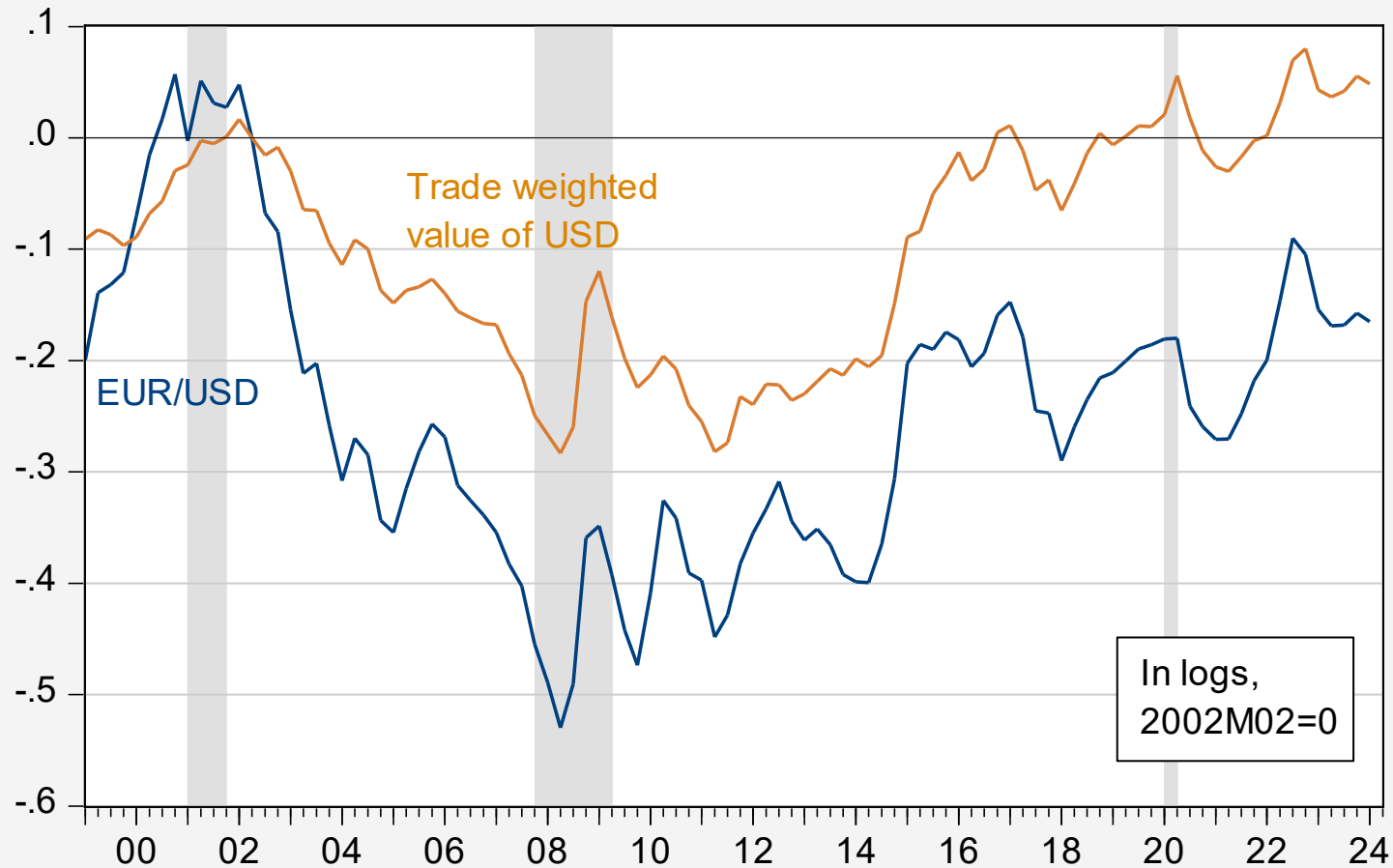
- Exchange rates: number of foreign currency units required to purchase one unit of home currency; also value of home currency.
- E.g., from EU resident perspective: $\$/\text{€}$,
 $\text{¥}/\text{€}$
- E.g., from Chinese resident perspective:
 $\text{\$/¥}$

Example: €/\$

EXUSEU

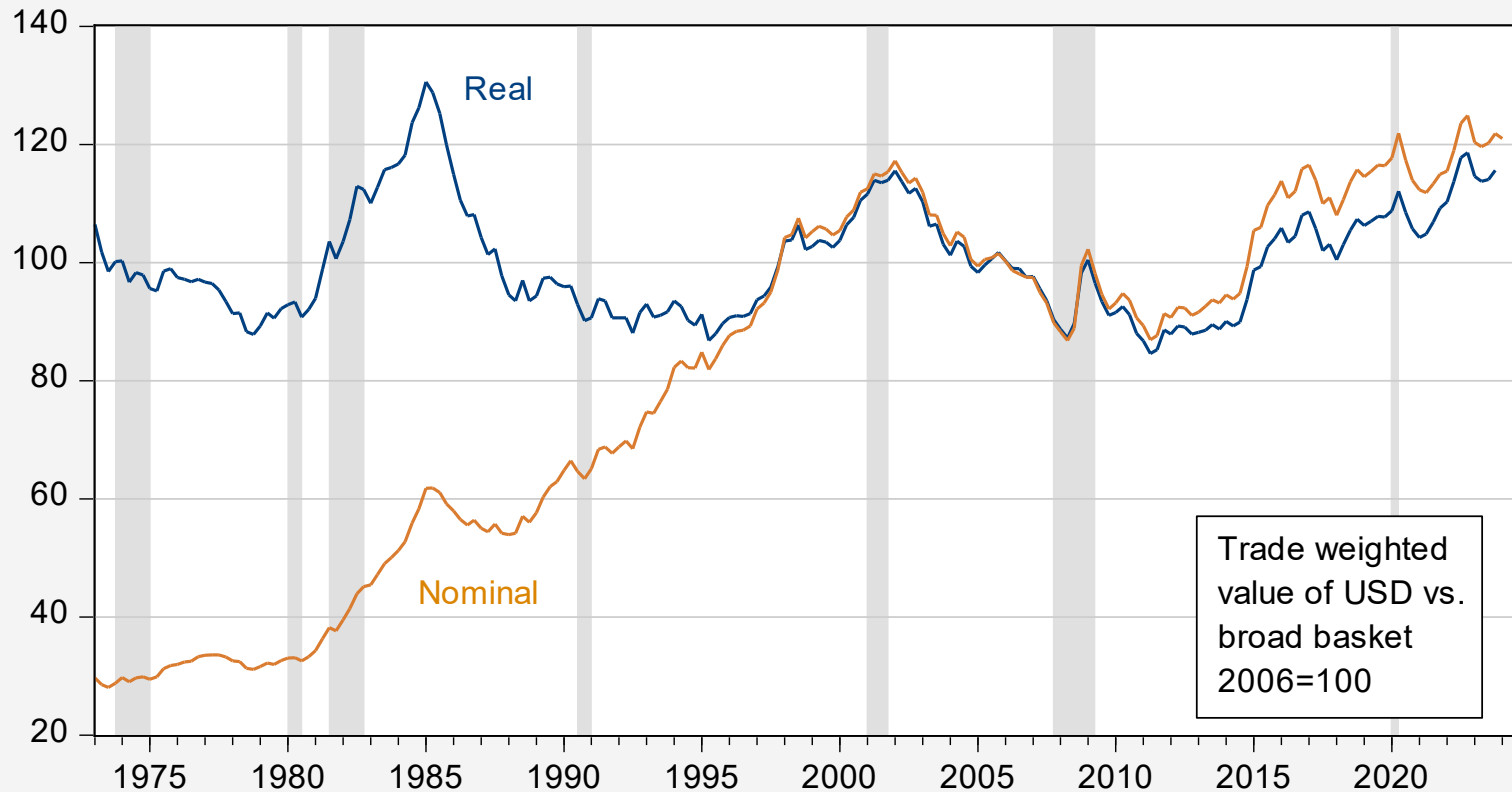


The Dollar Exchange Rate (vs. Euro, Trade Weighted basket)



Source: Federal Reserve Board via FRED

The Dollar Exchange Rate (Nominal vs. Real)



Source: Federal Reserve Board via FRED

Exchange Rate – Interest Rate

