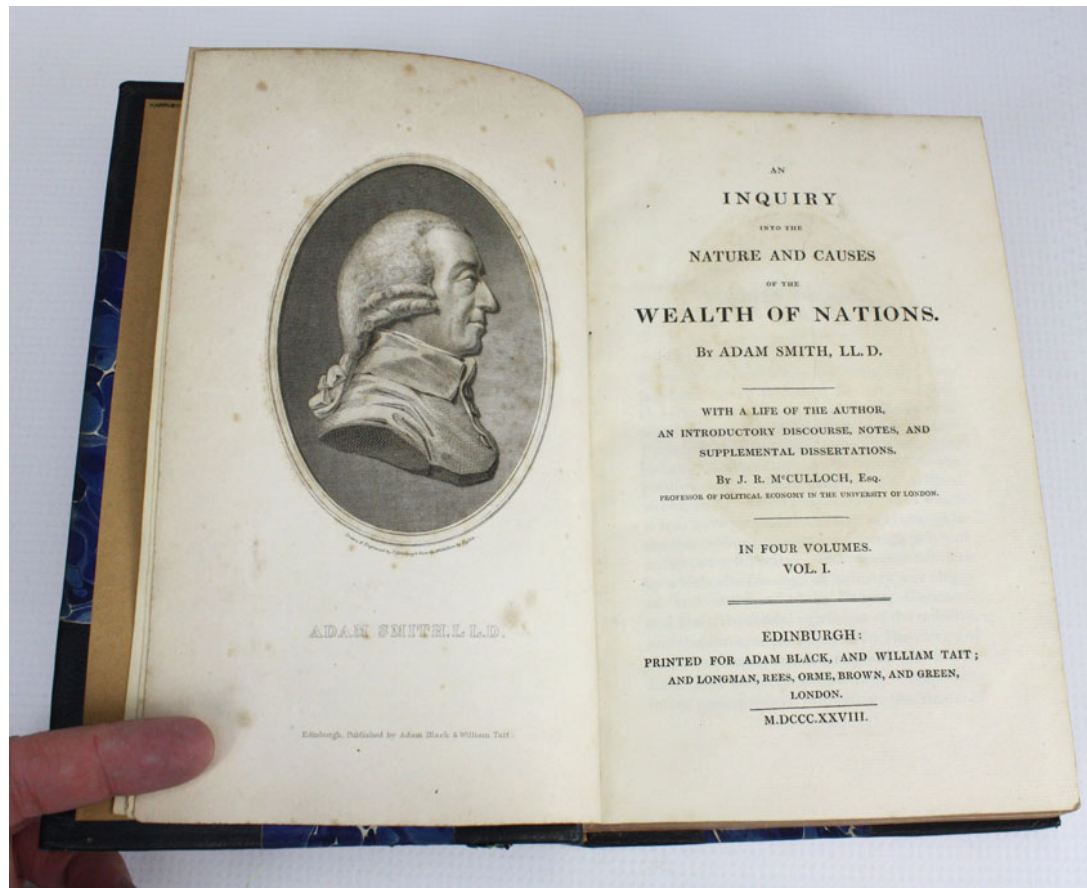


MMT and the Wealth of Nations: Sectoral Balances Meet Balance Sheets

Steve Roth

The Wealth of Nations



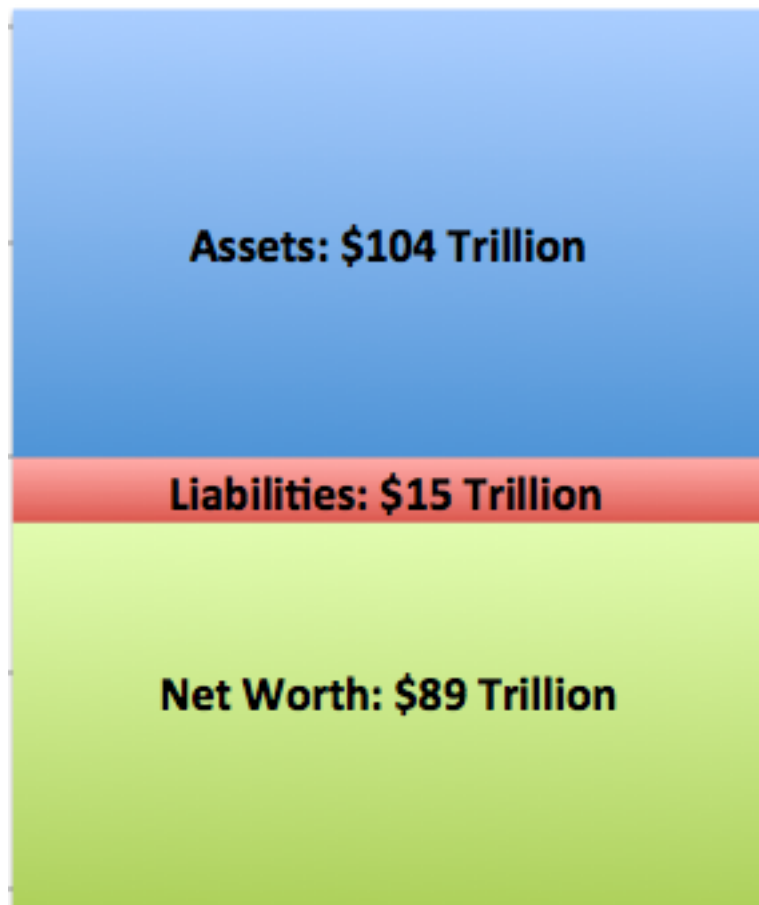
Michael Hudson and Dirk Bezemer:

“Capital” gains do not even appear in the NIPAs, nor is any meaningful measure provided by the Federal Reserve’s flow-of-funds statistics. Economists thus are operating “blindly.”

This is no accident, given the interest of FIRE sector lobbyists in making such gains and unearned income invisible, and hence not discussed as a major political issue.

The Wealth of Households

Household Sector Balance Sheet



End of Q2 2017

\$832,000 in assets per US household

Three quarters of a million dollars
in net worth

Fully Stock-Flow-Consistent Accounting

Datatype Datastream	BALANCE SHEET	Connection	INCOME STATEMENT	Datatype Datastream
BOLD = DOWNLOADABLE				
	ASSETS			
WC02003	Cash	}	Sales revenue	WC01001
WC08131	Accounts receivable		Cost of goods sold expense	WC01051
WC08136	Inventory		Depreciation expense **	WC01151
WC02140	Prepaid expenses		Amortization expense **	
WC04601 *	Fixed assets		Operating expenses	WC01249
WC02401	(accrued depreciation)		Interest income	WC01016
WC02649	Intangible assets		Income tax expense	WC01451
			Net income	WC01751
	Liabilities & owners' equity			
WC03040	Accounts payable		** Depreciation, Depletion And Amortization ?	
WC03101 current liabilities (part of)	Accrued expenses payable			
	Notes payable			
	Owners'equity - invested capital			
WC03495	Owners'equity - retained earnings			
* additions to fixed assets	Assets = Liabilities + Owner's Equity			
	Owner's Equity = Assets - Liabilities			

Flow of Funds Matrix

The image displays two screenshots of the 'Flow of Funds Matrix for 2017' from the Z.1 Report. The top screenshot shows a detailed matrix with columns for 'Gross Fixed Capital Formation', 'Gross Domestic Product', 'Gross Value Added', 'Gross Regional Product', 'Gross Domestic Product', 'Gross Value Added', 'Gross Regional Product', and 'Gross Domestic Product'. The bottom screenshot shows a similar matrix but with a different set of columns, including 'Gross Fixed Capital Formation', 'Gross Domestic Product', 'Gross Value Added', 'Gross Regional Product', 'Gross Domestic Product', 'Gross Value Added', 'Gross Regional Product', and 'Gross Domestic Product'. Both matrices show a complex web of financial flows between various sectors, with a 'Summary' tab visible on the right side of the top screenshot.

Z.1 Report, pages 1 and 2: Levels and Flows for seven sectors

Summary of the underlying F(lows) and L(evels) tables

Everything balances perfectly

Except...

Sectoral (L)evels Tables

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Z.1, June 9, 2016

L.101 Households and Nonprofit Organizations (1)

Billions of dollars; amounts outstanding end of period, not seasonally adjusted

	2010	2011	2012	2013	2014	2015	2015	2015	2015	2016	
							Q1	Q2	Q3	Q4	Q1
1	Total financial assets	53678.7	58082.5	65449.2	69153.0	70778.6	70494.0	70722.4	68983.3	70778.6	71078.1
2		8702.3	9227.2	9602.4	10210.5	10752.5	10344.0	10316.2	10425.0	10752.5	10853.6
3		57.4	49.5	51.7	45.3	30.5	43.8	39.1	35.1	30.5	25.3
4	Time savings deposits	723.8	887.5	1021.4	1158.5	1309.3	1221.5	1222.4	1163.3	1309.3	1318.8
5	Mutual fund shares	6442.2	6812.1	7179.2	7389.9	7886.4	8346.7	8063.8	8055.8	8220.9	8346.7
6	Money market fund shares	1128.6	1109.1	1111.1	1139.3	1120.2	1066.1	1014.9	999.0	1005.7	1066.1
7	Debt securities (money market securities)	4427.7	4438.2	4316.1	4335.1	4081.5	4545.6	4095.0	4275.7	4437.0	4545.6
8	Open market Treasury securities	21.1	19.4	18.8	15.0	14.9	13.7	15.2	15.7	14.3	13.7
9	Treasury securities	1106.7	702.0	943.9	1144.9	842.1	1123.5	880.0	953.2	1037.1	1123.5
10	Agency- and GSE-backed securities	289.8	330.6	239.9	279.7	336.5	539.8	307.7	356.1	434.3	539.8
11	Municipal securities	1905.7	1826.6	1679.2	1692.6	1605.1	1596.7	1620.7	1666.5	1629.3	1596.7
12	Corporate securities	1504.4	1549.7	1434.4	1202.9	1282.9	1272.0	1271.3	1304.1	1322.0	1272.0
13	Banks	922.8	917.5	918.8	970.3	1023.3	965.8	1024.1	995.0	991.6	965.8
14	Other loans and advances (2)	751.4	749.5	777.9	841.4	893.2	842.6	895.7	867.9	866.3	842.6
15	Mortgages	100.1	100.9	82.8	77.1	82.5	79.0	81.6	81.1	79.8	79.0
16	Consumer credit (student loans)	71.3	67.1	58.0	51.8	47.6	44.2	46.8	46.1	45.5	44.2
17	Corporate equities (3)	8694.4	8295.0	9669.9	12851.9	14203.3	13994.9	14729.8	14611.9	13256.1	13994.9
18	Mutual fund shares	4476.7	4435.2	5254.7	6250.5	6672.4	6556.5	6904.4	6906.3	6438.8	6556.5
19	Life insurance reserves	1137.5	1199.3	1186.4	1233.0	1282.8	1310.6	1300.0	1303.8	1298.3	1310.6
20	Pension entitlements (4)	16873.8	17298.8	18334.7	19783.8	20587.3	20945.5	20795.0	20904.3	20594.5	20945.5
21	Claims of pension fund on sponsor	3634.2	4027.9	3977.9	3365.2	3345.5	3840.8	3456.9	3715.4	4276.5	3840.8
22	Funded pension entitlements	13239.6	13270.9	14356.8	16418.7	17241.8	17104.7	17338.1	17188.9	16318.0	17104.7
23	Equity in noncorporate business	6898.4	7524.0	8313.7	9512.6	10174.7	10749.1	10381.5	10483.2	10601.4	10749.1
24	Miscellaneous assets	808.2	870.5	861.0	909.5	917.3	958.1	920.2	926.0	940.7	958.1
25	Total liabilities	13788.1	13579.5	13635.6	13784.7	14167.6	14520.0	14151.7	14295.7	14381.1	14520.0
26	Debt securities (money market securities)	263.2	255.5	241.0	227.8	223.1	218.0	223.0	219.7	217.2	218.0
27	Banks	13251.3	13049.8	13115.7	13274.0	13657.3	14012.1	13640.0	13786.1	13874.1	14012.1
28	Home mortgages (5)	9921.5	9701.9	9490.7	9403.8	9403.6	9493.8	9374.2	9417.3	9470.3	9493.8
29	Consumer credit	2647.2	2758.3	2920.4	3096.2	3318.0	3534.6	3322.8	3397.8	3481.4	3534.6
30	Depository institutions (n.e.c. (6))	61.0	11.5	62.6	90.8	211.9	325.8	232.5	246.3	268.7	325.8
31	Other loan advances	414.3	376.9	443.1	480.5	513.7	437.4	499.0	510.1	436.5	437.4
32	Commercial mortgages	207.3	201.1	198.9	202.7	210.1	220.5	211.4	214.5	217.2	220.5
33	Total	248.8	250.0	254.0	255.0	258.1	259.4	258.5	258.9	259.2	259.4
34	Depository institutions (n.e.c. (6))	24.7	24.3	24.9	27.9	29.1	30.6	30.2	31.0	30.6	31.8

(1) Sector includes domestic hedge funds, private equity funds, and personal trusts. Supplementary tables (tables F.101.a and L.101.a) show estimates of annual flows and year-end outstanding of nonprofit organizations.

(2) Includes cash, Treasury bills, and deposits and syndicated loans to nonfinancial corporate business by nonprofits and domestic hedge funds.

(3) Directly held shares, including shares of closed-end and exchange-traded funds. Other equities are included in mutual fund shares (line 18), life insurance reserves (line 19) and pension entitlements (line 20).

(4) Includes public and private defined benefit and defined contribution pension plans and annuities, including those in IRAs and in life insurance companies. Excludes social security.

(5) Includes loans made under home equity lines of credit and home equity loans secured by junior liens, shown on table L.218, line 23.

(6) Includes loans extended by the Federal Reserve to financial institutions such as domestic hedge funds through the Term Asset-Backed Securities Loan Facility (TALF), shown on table L.109, line 19.

Financial assets only

No real estate, for instance

Levels tables are *not* balance sheets

They don't tally total assets or net worth

Sectoral (F)low Tables

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460																																																																																																																																																																																																																																																																																																																																																													
1	1267.1	1325.6	1365.1	1408.4	1456.2	1508.7	1567.8	1637.0	1677.0	1645.7	1582.1	1576.0	1516.1	1448.8	1374.9	1300.2	1225.9	1152.8	1080.0	1007.5	935.4	863.5	791.7	720.0	648.3	576.6	504.9	433.2	361.5	289.8	218.1	146.4	74.7	3.0	-1.2	-3.4	-5.6	-7.8	-10.0	-12.2	-14.4	-16.6	-18.8	-21.0	-23.2	-25.4	-27.6	-29.8	-32.0	-34.2	-36.4	-38.6	-40.8	-43.0	-45.2	-47.4	-49.6	-51.8	-54.0	-56.2	-58.4	-60.6	-62.8	-65.0	-67.2	-69.4	-71.6	-73.8	-76.0	-78.2	-80.4	-82.6	-84.8	-87.0	-89.2	-91.4	-93.6	-95.8	-98.0	-100.2	-102.4	-104.6	-106.8	-109.0	-111.2	-113.4	-115.6	-117.8	-120.0	-122.2	-124.4	-126.6	-128.8	-131.0	-133.2	-135.4	-137.6	-139.8	-142.0	-144.2	-146.4	-148.6	-150.8	-153.0	-155.2	-157.4	-159.6	-161.8	-164.0	-166.2	-168.4	-170.6	-172.8	-175.0	-177.2	-179.4	-181.6	-183.8	-186.0	-188.2	-190.4	-192.6	-194.8	-197.0	-199.2	-201.4	-203.6	-205.8	-208.0	-210.2	-212.4	-214.6	-216.8	-219.0	-221.2	-223.4	-225.6	-227.8	-230.0	-232.2	-234.4	-236.6	-238.8	-241.0	-243.2	-245.4	-247.6	-249.8	-252.0	-254.2	-256.4	-258.6	-260.8	-263.0	-265.2	-267.4	-269.6	-271.8	-274.0	-276.2	-278.4	-280.6	-282.8	-285.0	-287.2	-289.4	-291.6	-293.8	-296.0	-298.2	-300.4	-302.6	-304.8	-307.0	-309.2	-311.4	-313.6	-315.8	-318.0	-320.2	-322.4	-324.6	-326.8	-329.0	-331.2	-333.4	-335.6	-337.8	-340.0	-342.2	-344.4	-346.6	-348.8	-351.0	-353.2	-355.4	-357.6	-359.8	-362.0	-364.2	-366.4	-368.6	-370.8	-373.0	-375.2	-377.4	-379.6	-381.8	-384.0	-386.2	-388.4	-390.6	-392.8	-395.0	-397.2	-399.4	-401.6	-403.8	-406.0	-408.2	-410.4	-412.6	-414.8	-417.0	-419.2	-421.4	-423.6	-425.8	-428.0	-430.2	-432.4	-434.6	-436.8	-439.0	-441.2	-443.4	-445.6	-447.8	-450.0	-452.2	-454.4	-456.6	-458.8	-461.0	-463.2	-465.4	-467.6	-469.8	-472.0	-474.2	-476.4	-478.6	-480.8	-483.0	-485.2	-487.4	-489.6	-491.8	-494.0	-496.2	-498.4	-500.6	-502.8	-505.0	-507.2	-509.4	-511.6	-513.8	-516.0	-518.2	-520.4	-522.6	-524.8	-527.0	-529.2	-531.4	-533.6	-535.8	-538.0	-540.2	-542.4	-544.6	-546.8	-549.0	-551.2	-553.4	-555.6	-557.8	-560.0	-562.2	-564.4	-566.6	-568.8	-571.0	-573.2	-575.4	-577.6	-579.8	-582.0	-584.2	-586.4	-588.6	-590.8	-593.0	-595.2	-597.4	-599.6	-601.8	-604.0	-606.2	-608.4	-610.6	-612.8	-615.0	-617.2	-619.4	-621.6	-623.8	-626.0	-628.2	-630.4	-632.6	-634.8	-637.0	-639.2	-641.4	-643.6	-645.8	-648.0	-650.2	-652.4	-654.6	-656.8	-659.0	-661.2	-663.4	-665.6	-667.8	-670.0	-672.2	-674.4	-676.6	-678.8	-681.0	-683.2	-685.4	-687.6	-689.8	-692.0	-694.2	-696.4	-698.6	-700.8	-703.0	-705.2	-707.4	-709.6	-711.8	-714.0	-716.2	-718.4	-720.6	-722.8	-725.0	-727.2	-729.4	-731.6	-733.8	-736.0	-738.2	-740.4	-742.6	-744.8	-747.0	-749.2	-751.4	-753.6	-755.8	-758.0	-760.2	-762.4	-764.6	-766.8	-769.0	-771.2	-773.4	-775.6	-777.8	-780.0	-782.2	-784.4	-786.6	-788.8	-791.0	-793.2	-795.4	-797.6	-799.8	-802.0	-804.2	-806.4	-808.6	-810.8	-813.0	-815.2	-817.4	-819.6	-821.8	-824.0	-826.2	-828.4	-830.6	-832.8	-835.0	-837.2	-839.4	-841.6	-843.8	-846.0	-848.2	-850.4	-852.6	-854.8	-857.0	-859.2	-861.4	-863.6	-865.8	-868.0	-870.2	-872.4	-874.6	-876.8	-879.0	-881.2	-883.4	-885.6	-887.8	-890.0	-892.2	-894.4	-896.6	-898.8	-901.0	-903.2	-905.4	-907.6	-909.8	-912.0	-914.2	-916.4	-918.6	-920.8	-923.0	-925.2	-927.4	-929.6	-931.8	-934.0	-936.2	-938.4	-940.6	-942.8	-945.0	-947.2	-949.4	-951.6	-953.8	-956.0	-958.2	-960.4	-962.6	-964.8	-967.0	-969.2	-971.4	-973.6	-975.8	-978.0	-980.2	-982.4	-984.6	-986.8	-989.0	-991.2	-993.4	-995.6	-997.8	-1000.0	-1002.2	-1004.4	-1006.6	-1008.8	-1011.0	-1013.2	-1015.4	-1017.6	-1019.8	-1022.0	-1024.2	-1026.4	-1028.6	-1030.8	-1033.0	-1035.2	-1037.4	-1039.6	-1041.8	-1044.0	-1046.2	-1048.4	-1050.6	-1052.8	-1055.0	-1057.2	-1059.4	-1061.6	-1063.8	-1066.0	-1068.2	-1070.4	-1072.6	-1074.8	-1077.0	-1079.2	-1081.4	-1083.6	-1085.8	-1088.0	-1090.2	-1092.4	-1094.6	-1096.8	-1099.0	-1101.2	-1103.4	-1105.6	-1107.8	-1110.0	-1112.2	-1114.4	-1116.6	-1118.8	-1121.0	-1123.2	-1125.4	-1127.6	-1129.8	-1132.0	-1134.2	-1136.4	-1138.6	-1140.8	-1143.0	-1145.2	-1147.4	-1149.6	-1151.8	-1154.0	-1156.2	-1158.4	-1160.6	-1162.8	-1165.0	-1167.2	-1169.4	-1171.6	-1173.8	-1176.0	-1178.2	-1180.4	-1182.6	-1184.8	-1187.0	-1189.2	-1191.4	-1193.6	-1195.8	-1198.0	-1200.2	-1202.4	-1204.6	-1206.8	-1209.0	-1211.2	-1213.4	-1215.6	-1217.8	-1220.0	-1222.2	-1224.4	-1226.6	-1228.8	-1231.0	-1233.2	-1235.4	-1237.6	-1239.8	-1242.0	-1244.2	-1246.4	-1248.6	-1250.8	-1253.0	-1255.2	-1257.4	-1259.6	-1261.8	-1264.0	-1266.2	-1268.4	-1270.6	-1272.8	-1275.0	-1277.2	-1279.4	-1281.6	-1283.8	-1286.0	-1288.2	-1290.4	-1292.6	-1294.8	-1297.0	-1299.2	-1301.4	-1303.6	-1305.8	-1308.0	-1310.2	-1312.4	-1314.6	-1316.8	-1319.0	-1321.2	-1323.4	-1325.6	-1327.8	-1330.0	-1332.2	-1334.4	-1336.6	-1338.8	-1341.0	-1343.2	-1345.4	-1347.6	-1349.8	-1352.0	-1354.2	-1356.4	-1358.6	-1360.8	-1363.0	-1365.2	-1367.4	-1369.6	-1371.8	-1374.0	-1376.2	-1378.4	-1380.6	-1382.8	-1385.0	-1387.2	-1389.4	-1391.6	-1393.8	-1396.0	-1398.2	-1400.4	-1402.6	-1404.8	-1407.0	-1409.2	-1411.4	-1413.6	-1415.8	-1418.0	-1420.2	-1422.4	-1424.6	-1426.8	-1429.0	-1431.2	-1433.4	-1435.6	-1437.8	-1440.0	-1442.2	-1444.4	-1446.6	-1448.8	-1451.0	-1453.2	-1455.4	-1457.6	-1459.8	-1462.0	-1464.2	-1466.4	-1468.6	-1470.8	-1473.0	-1475.2	-1477.4	-1479.6	-1481.8	-1484.0	-1486.2	-1488.4	-1490.6	-1492.8	-1495.0	-1497.2	-1499.4	-1501.6	-1503.8	-1506.0	-1508.2	-1510.4	-1512.6	-1514.8	-1517.0	-1519.2	-1521.4	-1523.6	-1525.8	-1528.0	-1530.2	-1532.4	-1534.6	-1536.8	-1539.0	-1541.2	-1543.4	-1545.6	-1547.8	-1550.0	-1552.2	-1554.4	-1556.6	-1558.8	-1561.0	-1563.2	-1565.4	-1567.6	-1569.8	-1572.0	-1574.2	-1576.4	-1578.6	-1580.8	-1583.0	-1585.2	-1587.4	-1589.6	-1591.8	-1594.0	-1596.2	-1598.4	-1600.6	-1602.8	-1605.0	-1607.2	-1609.4	-1611.6	-1613.8	-1616.0	-1618.2	-1620.4	-1622.6	-1624.8	-1627.0	-1629.2	-1631.4	-1633.6	-1635.8	-1638.0	-1640.2	-1642.4	-1644.6	-1646.8	-1649.0	-1651.2	-1653.4	-1655.6	-1657.8	-1660.0	-1662.2	-1664.4	-1666.6	-1668.8	-1671.0	-1673.2	-1675.4	-1677.6	-1679.8	-1682.0	-1684.

Don't show holding gains, even for financial assets

Can't explain changes in balance-sheet assets, or net worth

IMAs: Putting the “stock” back in stock-flow consistency

Three accounts added to the FFA matrix:

- **Revaluation** — nominal holding gains on previously existing assets, marked to market
- **Other changes in volume.** Kind of a catch-all.
- **Balance sheet** — Including both financial and non-financial assets

Bottom line “stocks”: total assets and net worth

Sources – Uses = Change in Net Worth

	HOUSEHOLD INCOME: SOURCES AND USES				
		2011	2012	2013	2014
1	Starting Net Worth	62,574.8	63,839.8	69,922.1	79,371.0
2	Sources				
3	Comprehensive Income	15,091.5	20,343.0	24,372.9	19,602.6
4	Compensation for Labor	10,629.5	10,976.2	11,266.4	11,778.2
5	Wages and Salaries	6,633.2	6,930.3	7,114.4	7,477.8
6	Social benefits and current transfers received (including employers' social contributions)	3,996.3	4,045.9	4,152.0	4,300.4
7	Compensation for Ownership	4,462.0	9,366.8	13,106.5	7,824.4
8	Primary Ownership Income	3,905.1	4,236.3	4,227.7	4,380.6
9	Dividends, interest, proprietors' income, operating surplus (=homeowner-imputed rent), and rental income of tenant-occupied housing	3,905.1	4,236.3	4,227.7	4,380.6
10	Other Ownership Income	556.9	5,130.5	8,878.8	3,443.8
11	Capital gains/market asset revaluation	-98.2	4,462.9	7,934.4	2,864.0
12	Other Volume Changes	655.1	667.6	944.4	579.8
13	<i>Addendum: Primary Income (Lines 4 and 8)</i>	14,534.6	15,212.5	15,494.1	16,158.8
14	Uses and Change in Net Worth	15,091.5	20,343.0	24,372.9	19,602.6
15	Uses	13,826.6	14,260.8	14,923.9	15,547.7
16	Consumption expenditures	10,689.3	11,050.6	11,392.3	11,865.9
17	Social contributions and other current transfers	1,073.9	1,126.6	1,288.9	1,339.7
18	Taxes (including taxes on production and imports less subsidies)	1,453.2	1,511.4	1,672.8	1,780.2
19	Interest paid	608.2	577.3	550.1	552.6
20	Capital transfers paid (net)	2.0	-5.1	19.8	9.3
21	Change in/Contribution to Net Worth (Comprehensive Saving)	1,264.9	6,082.2	9,449.0	4,054.9
22	Ending Net Worth	63,839.8	69,922.1	79,371.0	83,425.7
	<i>Addenda:</i>				
23	<i>Primary Saving (Line 13 - Line 15)</i>	708.0	951.7	570.2	611.1
24	<i>Comprehensive Disposable Income (Lines 16 and 21, or Line 3 - Lines 17+18+19+20)</i>	11,954.2	17,132.8	20,841.3	15,920.8

Revaluation Account

Revaluation account

- 83 **Nonfinancial assets**
- 84 Real estate
- 85 Consumer durable goods
- 86 Equipment
- 87 Intellectual property products
- 88 **Financial assets**
- 89 Corporate equities
- 90 Mutual fund shares
- 91 Equity in noncorporate business
- 92 Equity investment under Public-Private Inv. Program
- 93 Insurance, pension and standardized guarantee schemes
- 94 **Changes in net worth due to nominal holding gains/losses**

What Does This Mean for MMT?

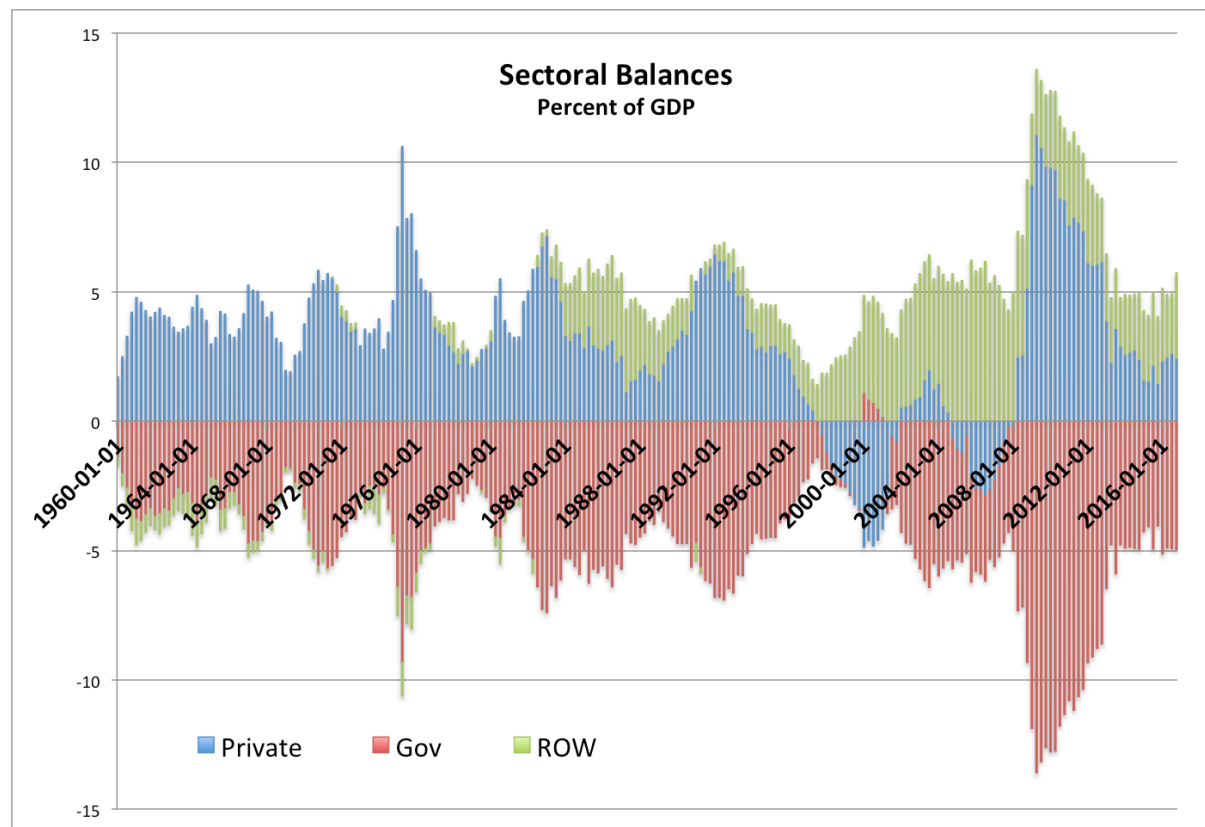
Implications for key MMT concepts and constructs:

Sectoral balances identity

Private-sector “surplus” or “saving”

Inside and outside money

Sectoral Balances



Simplified:
Government deficit spending adds Assets to private-sector balance sheets.

Creates no new PS liabilities, so
+ private-sector Net Worth

“Surplus”

Holding Gains Also Create Assets

Hey: Apple
stock just
traded at a
higher price!

A	L & NW
More Assets!	Liabilities + Net Worth

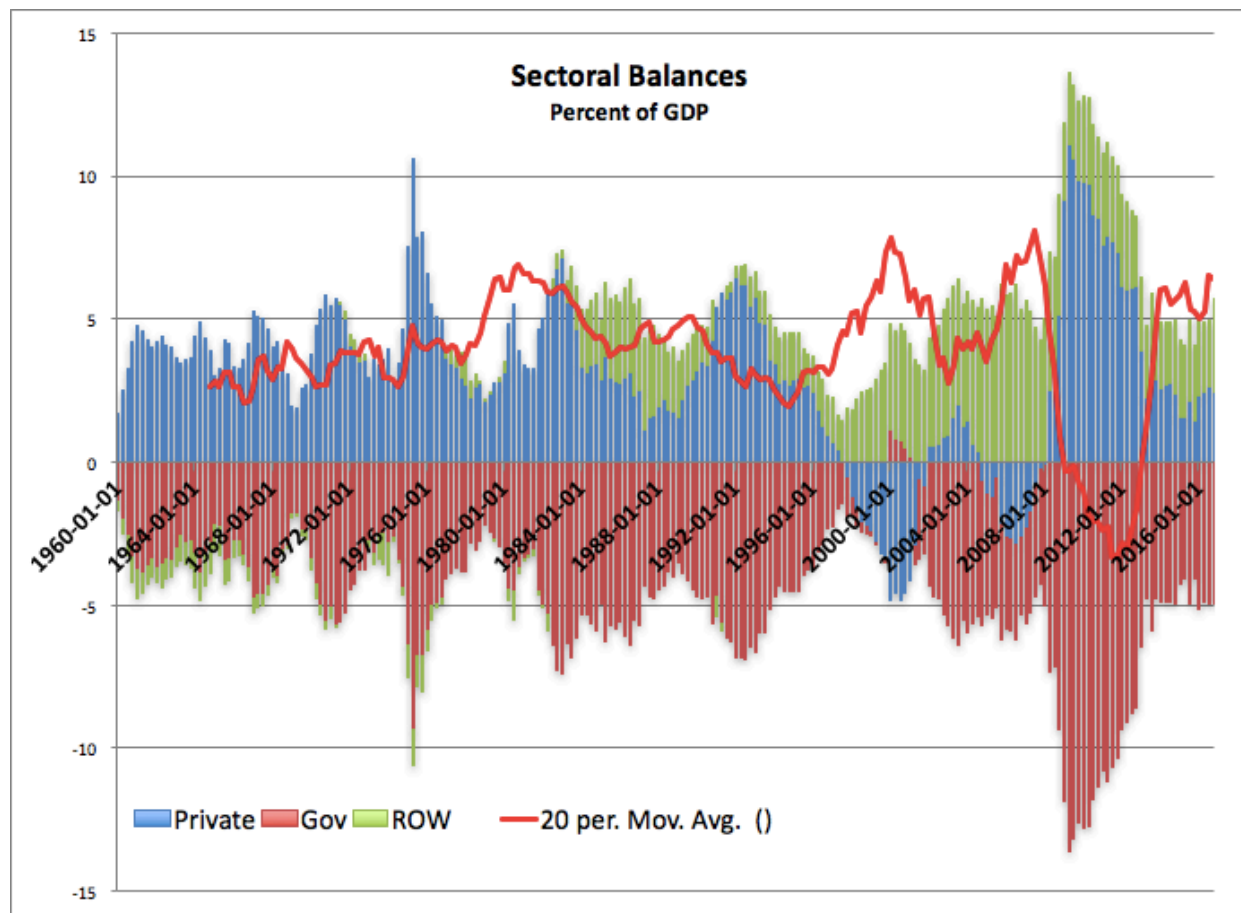
A	L & NW
More Assets!	Liabilities + Net Worth

A	L & NW
More Assets!	Liabilities + Net Worth

A	L & NW
More Assets!	Liabilities + Net Worth

More assets and net worth. More wealth.

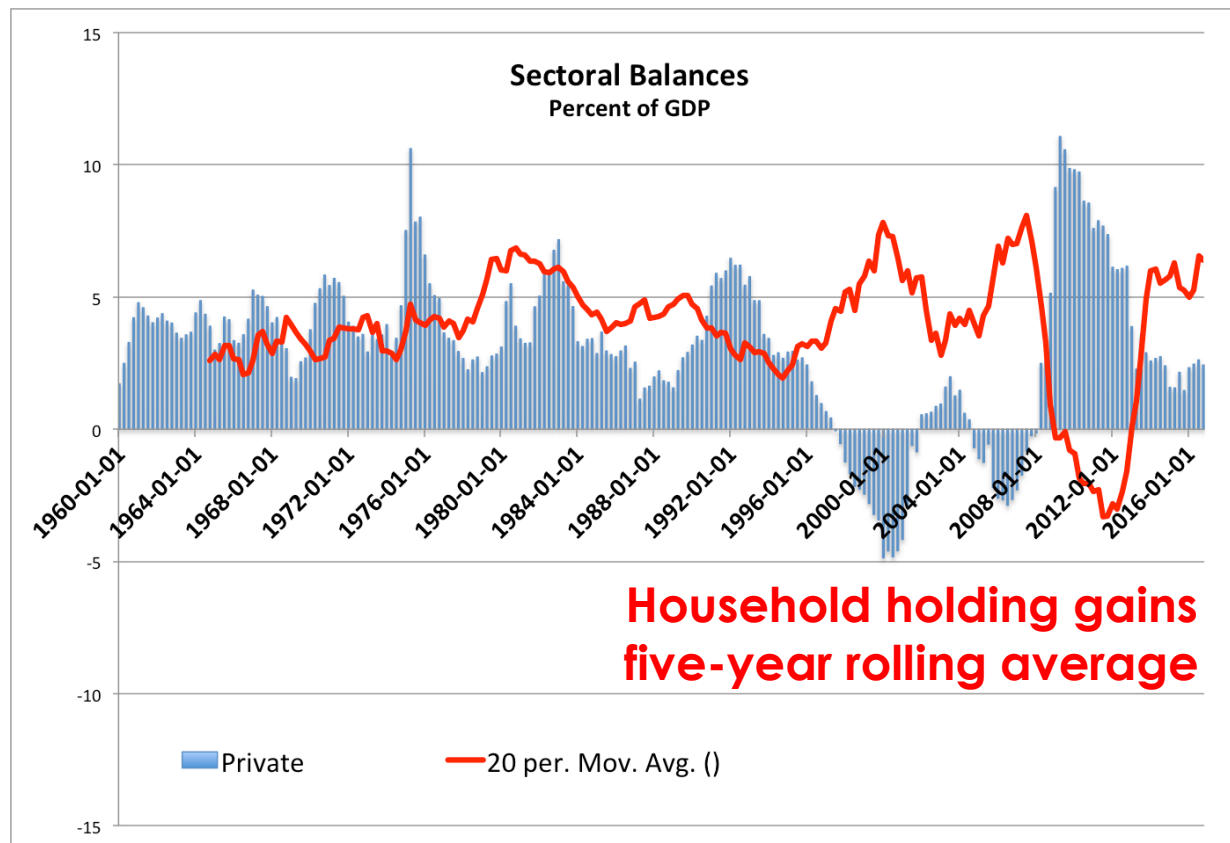
Sectoral Balances and Holding Gains



Holding gains:
volatile, but
persistent

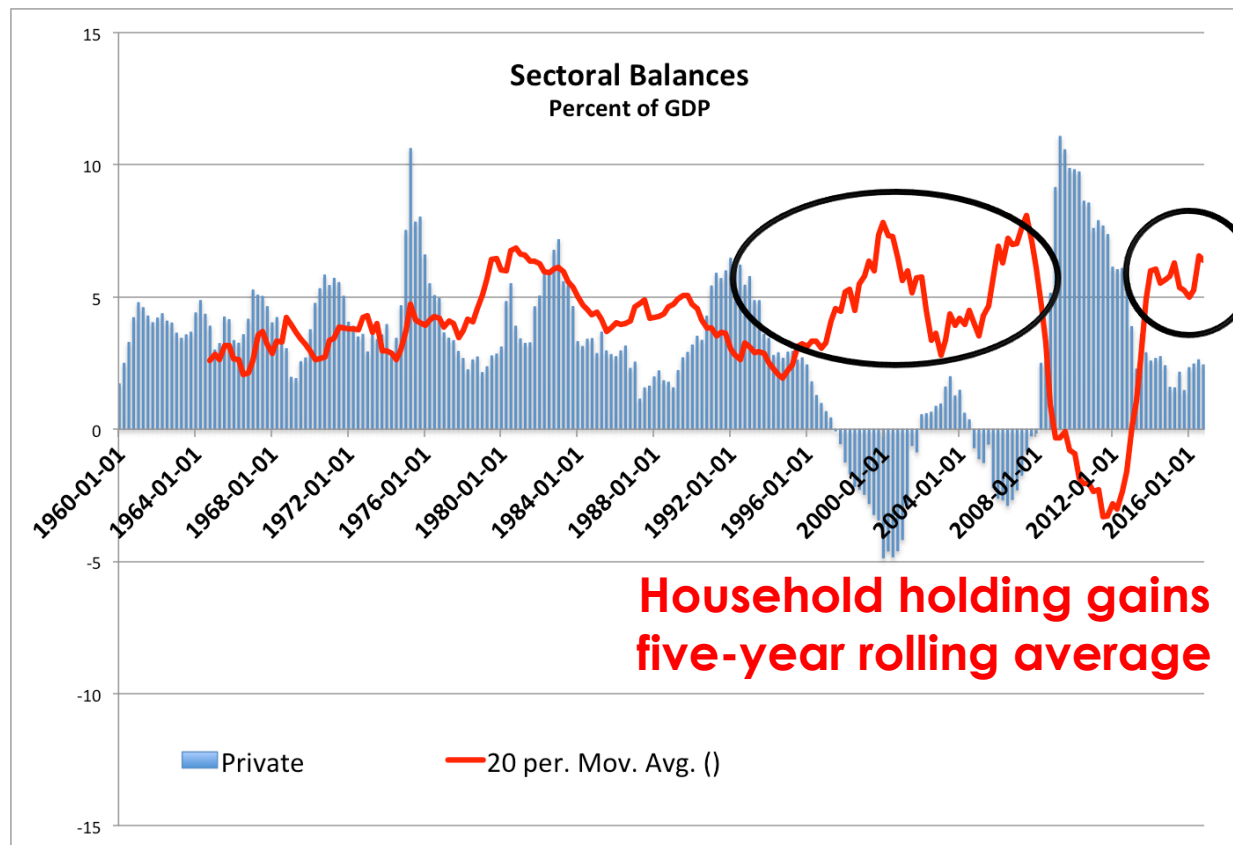
**Red = Household
holding gains five-
year rolling average**

Sectoral Balances and Holding Gains



Just showing
private “surplus”
vs holding gains

Sectoral Balances and Holding Gains



Surplus vs holding gains

1996–2008,
holding gains
dominate

Also since the
latest recovery

2013: \$7T in cap
gains

Inside Money, Outside Money, and Holding Gains

Outside: Government deficit spending. +Private-sector assets, zero new liabilities.

+Net Worth.

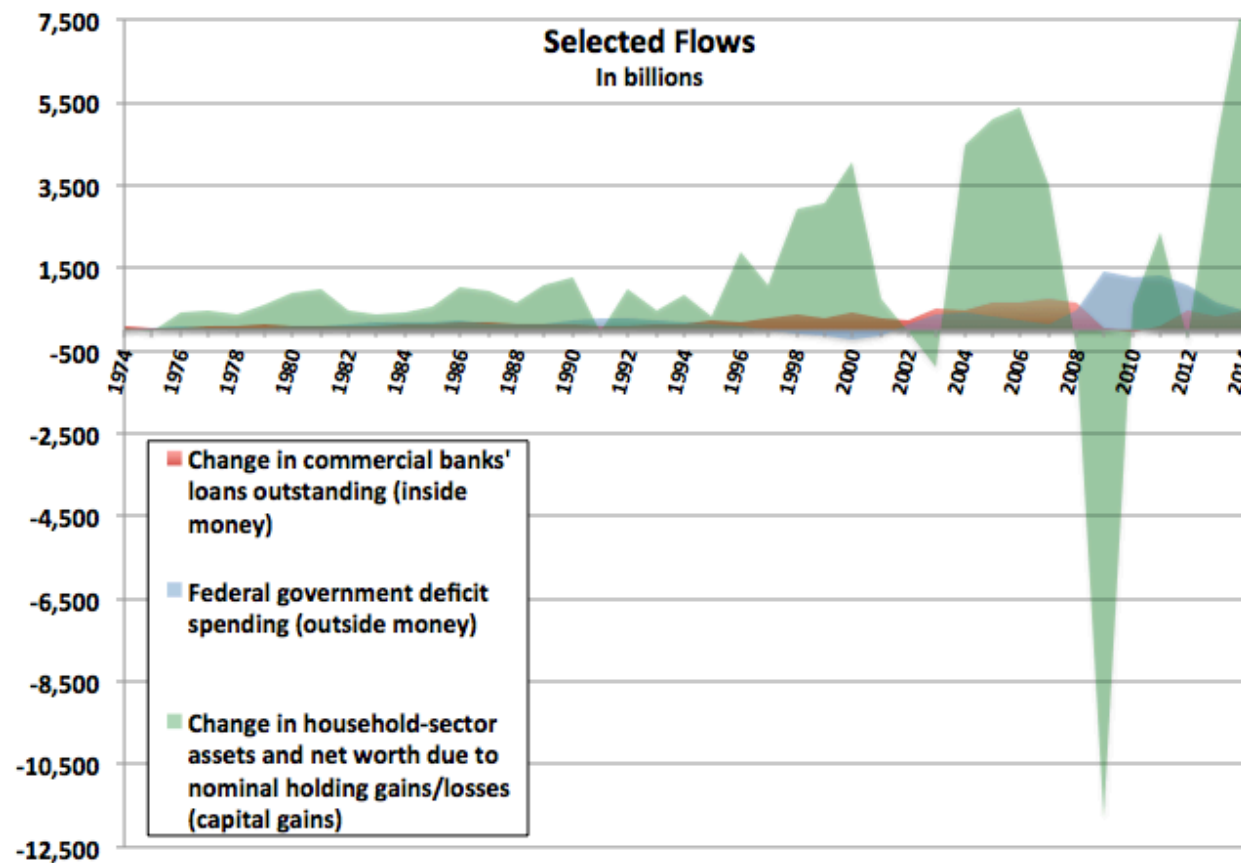
Inside: Bank lending. +Private-sector assets, +liabilities.
Expanded balance sheets

No Δ Net Worth.

Holding gains: +Private-sector assets, zero new liabilities.

+Net Worth.

“Printing” Assets: Inside Money, Outside Money, and Holding Gains



Additions to HH
balance-sheet
assets

Just showing
magnitude

Flows not sector-
equivalent or
summable

Holding Gains Dominate Changes in Private-Sector Balance Sheets

“Money Printing,” 1973 through 2014
New Private Sector Assets Created *Ab Nihilo*
(Note: Nominal \$s)

Holding gains: \$51 Trillion

Federal Deficits: \$11 Trillion

Commercial Bank Net New Lending: \$10 Trillion

Why Holding Gains Are Different

No sector issues them

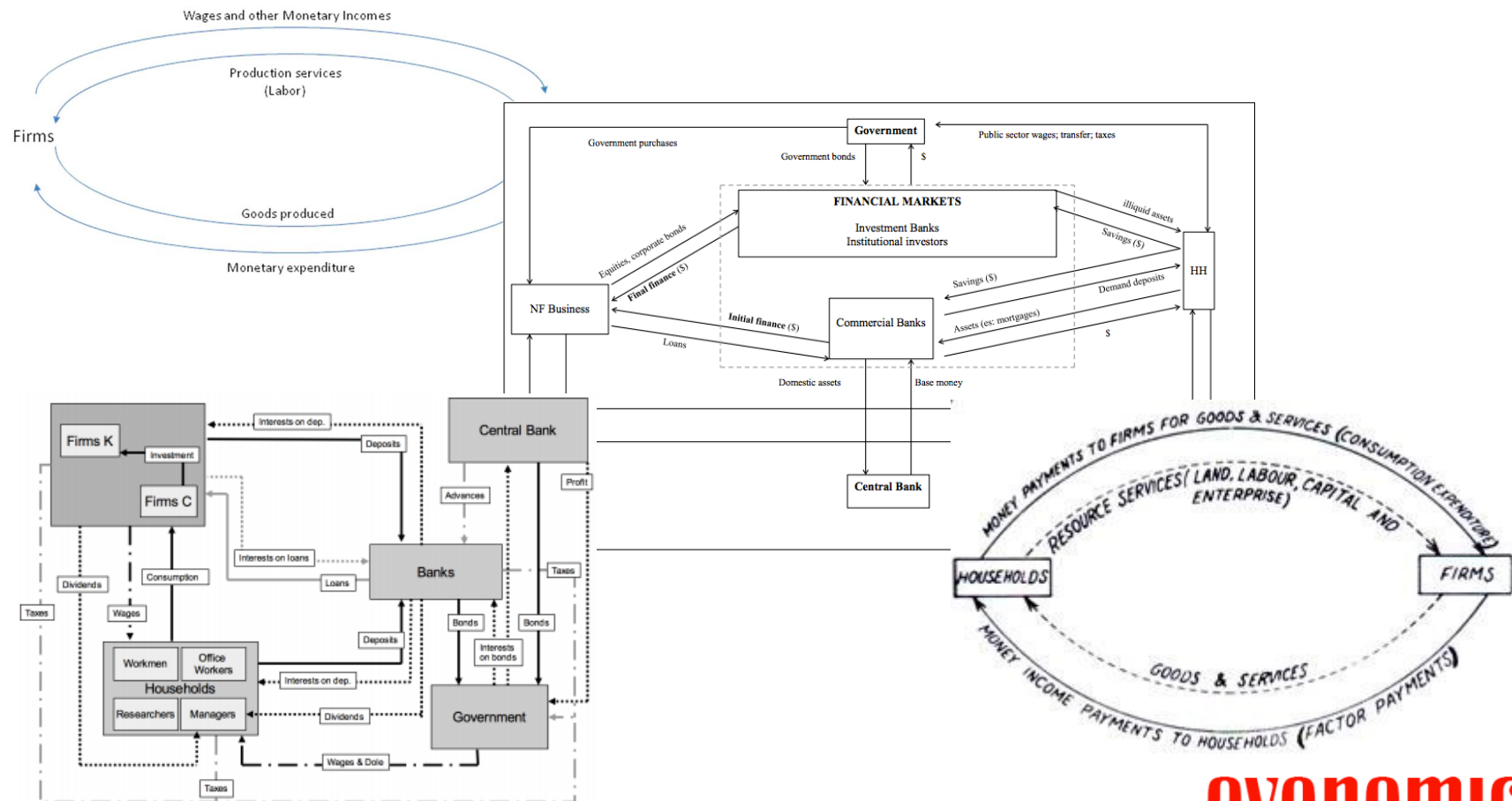
One executed order for Apple stock changes the marked-to-market balance-sheet value of every other share

New assets from market runups are truly created *ab novo* and *ab nihilo*

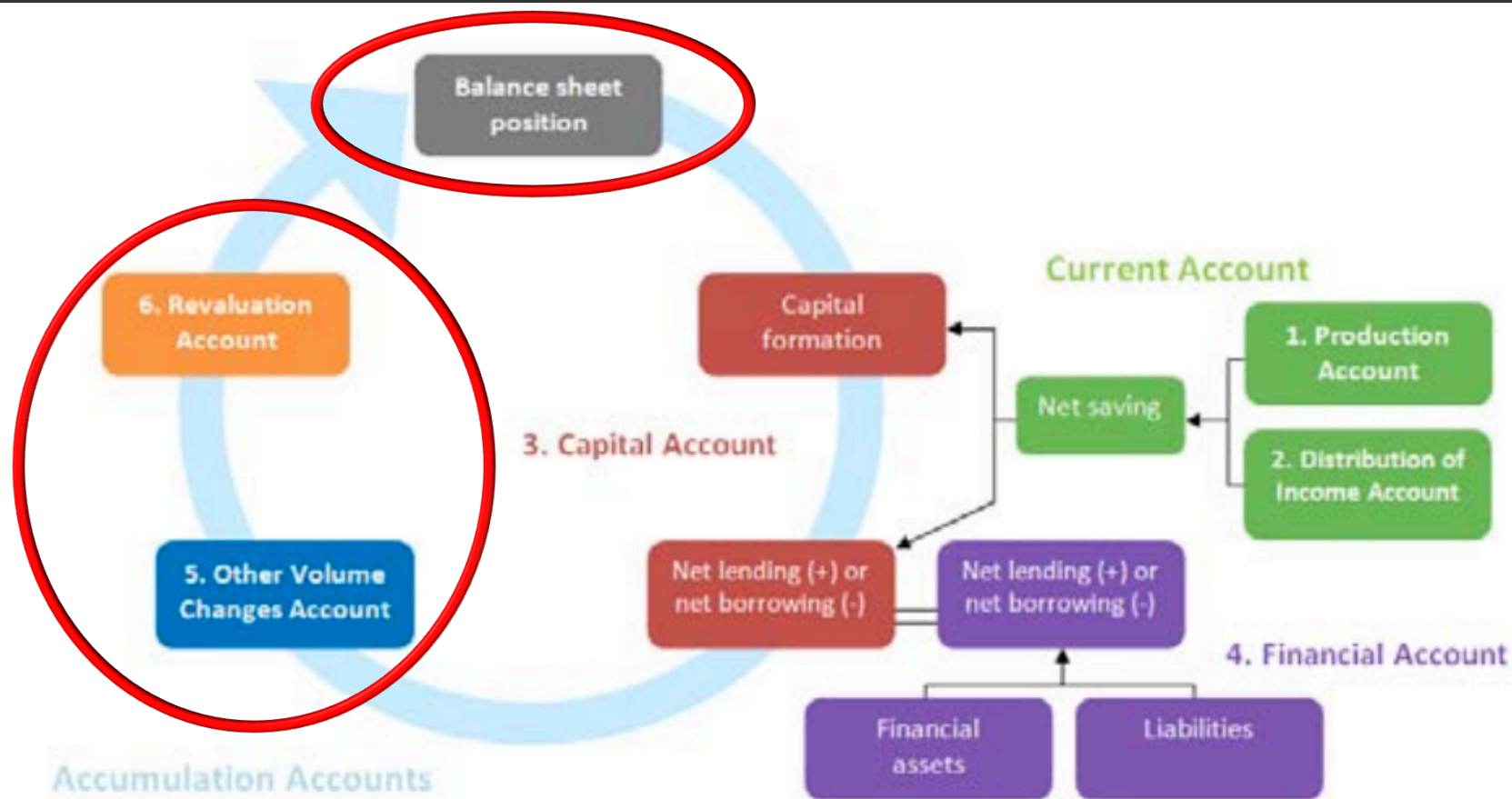
This can't exist in the closed-loop, balance-to-zero FFA matrix.

The economy doesn't balance to zero. It balances to net worth. Wealth increases.

Monetary Circuits



The IMAs' Accounting Circuit



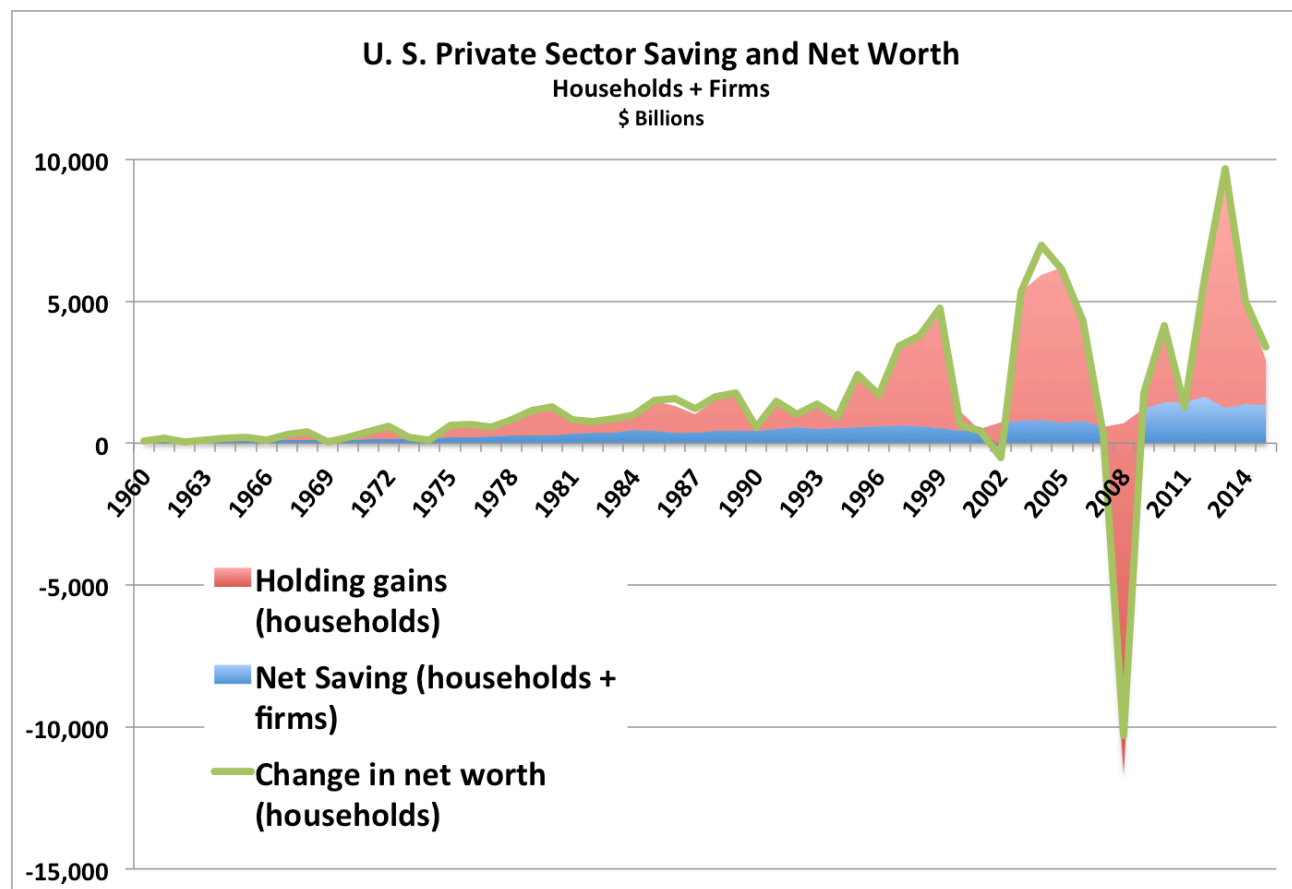
Starting and ending with the balance sheet

Godley-Lavoie Matrices, Monetary Circuits, and Holding Gains

Table 2.7 Full-integration matrix

		Households (1)	Production firms (2)	Banks (3)	Government (4)	Central bank (5)	Σ
	Net worth, end of previous period	NW_{h-1}	NW_{f-1}	NW_{b-1}	NW_{g-1}	0	K_{-1}
Change in net assets arising from transactions	Change in loans	$-\Delta L_b$	$-\Delta L_f$	$+\Delta L$			0
	Change in cash	$+\Delta H_h$		$+\Delta H_b$		$-\Delta H$	0
	Change in deposits	$+\Delta M_h$		$-\Delta M$			0
	Change in bills	$+\Delta B_h$		$+\Delta B_b$	$-\Delta B$	$+\Delta B_{cb}$	0
	Change in equities	$+\Delta e_f \cdot p_{ef} + \Delta e_b \cdot p_{eb}$	$-\Delta e_f \cdot p_{ef}$	$-\Delta e_b \cdot p_{eb}$			0
	Change in tangible capital	$+\Delta k_h \cdot p_k$	$+\Delta k_f \cdot p_k$				$+\Delta k \cdot p_k$
Change in net assets arising from revaluations	Capital gains in equities	$+\Delta p_{ef} \cdot e_{f-1}$ $+\Delta p_{eb} \cdot e_{b-1}$	$-\Delta p_{ef} \cdot e_{f-1}$	$-\Delta p_{eb} \cdot e_{b-1}$			0
	Capital gains in tangible capital	$+\Delta p_k \cdot k_{h-1}$	$+\Delta p_k \cdot k_{f-1}$				$\Delta p_k \cdot (k_{h-1} + k_{f-1})$
	Net worth, end of period	NW_h	NW_f	NW_b	NW_g	0	K

Saving and Wealth Accumulation: Households + Firms



“Saving” doesn’t explain wealth accumulation.

Not even close.

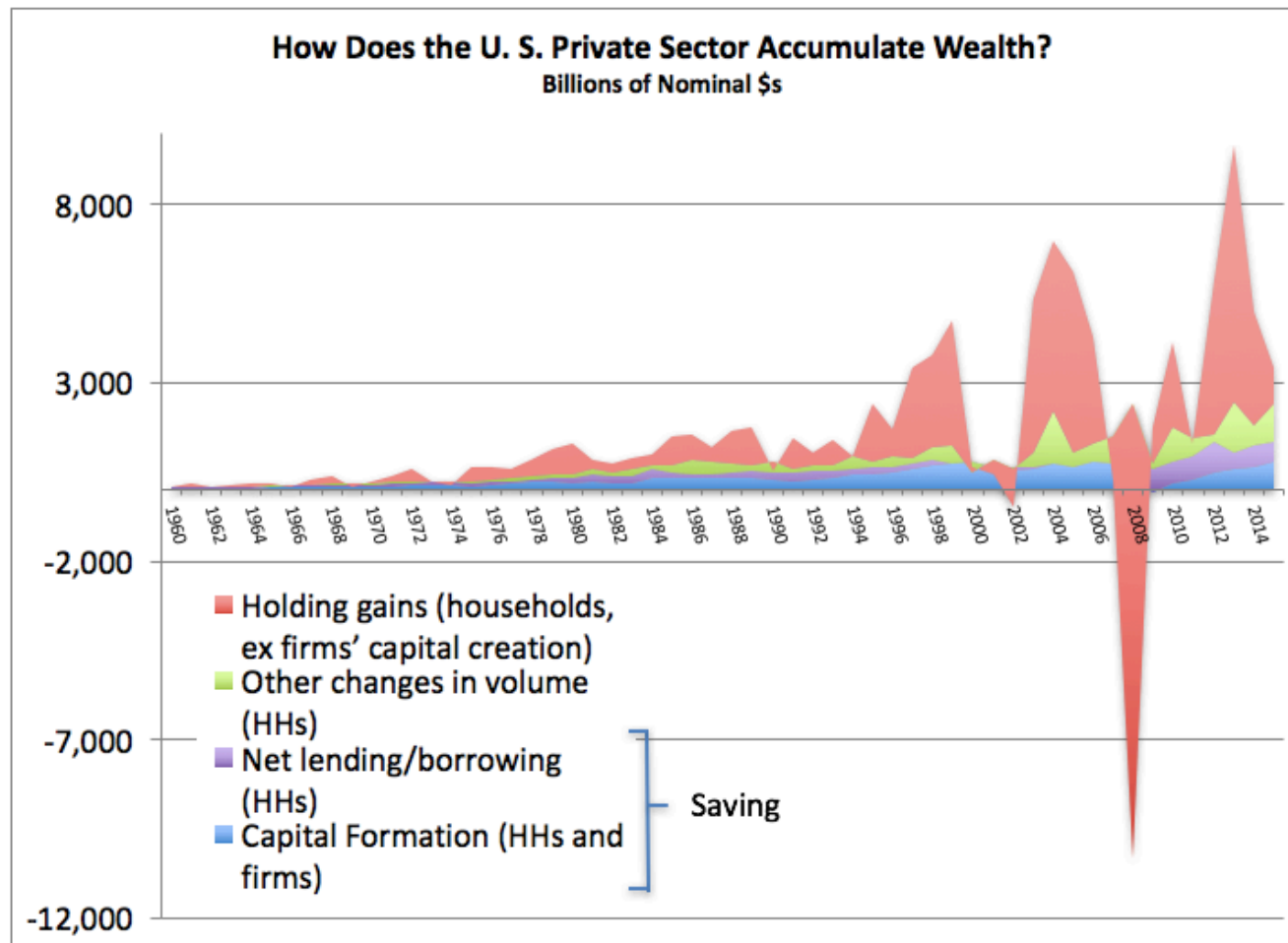
(Firms’ saving here deducted from HH cap gains)

The IMA Derivation of Δ Net Worth

Change in net worth (lines 32+38+78+94)

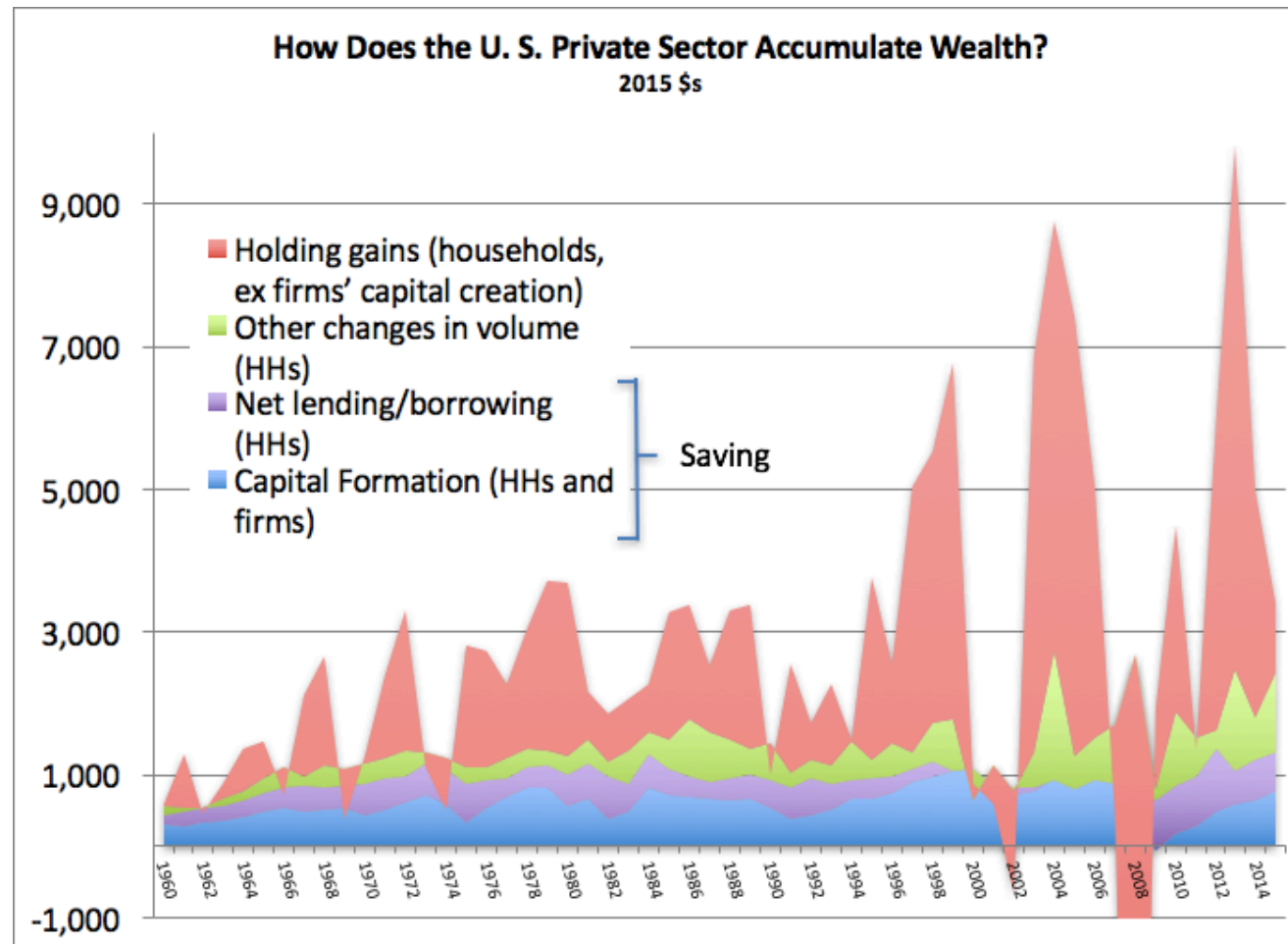
- + Capital formation
 - + Net lending/borrowing
 - + Other changes in volume
 - + Holding gains
- |— Saving

Change in Net Worth, IMA Derivation



Nominal Dollars

Change in Real Net Worth



2015 Dollars

Godley-Lavoie and Haig-Simons Income

H-S Income = “Primary” Income + Holding Gains (marked to market)

Equals: Consumption Spending + Δ Net Worth

So Haig-Simons Saving would be ... Δ Net Worth

Monetary Economics:

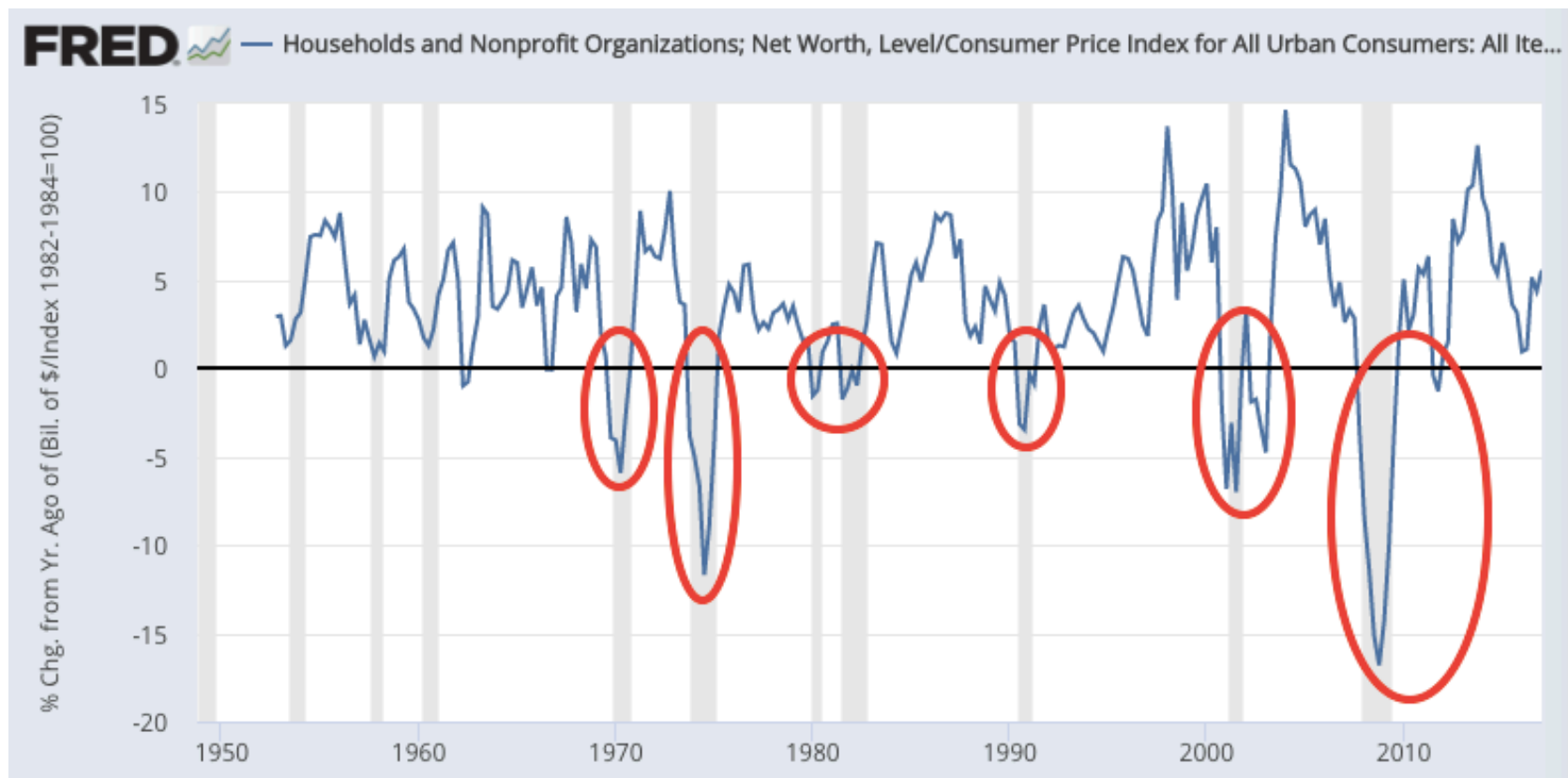
“It should be noted that capital gains have not been included within the definition of disposable income, but this of course is a matter of convention.”

Michael Hudson and Dirk Bezemer:

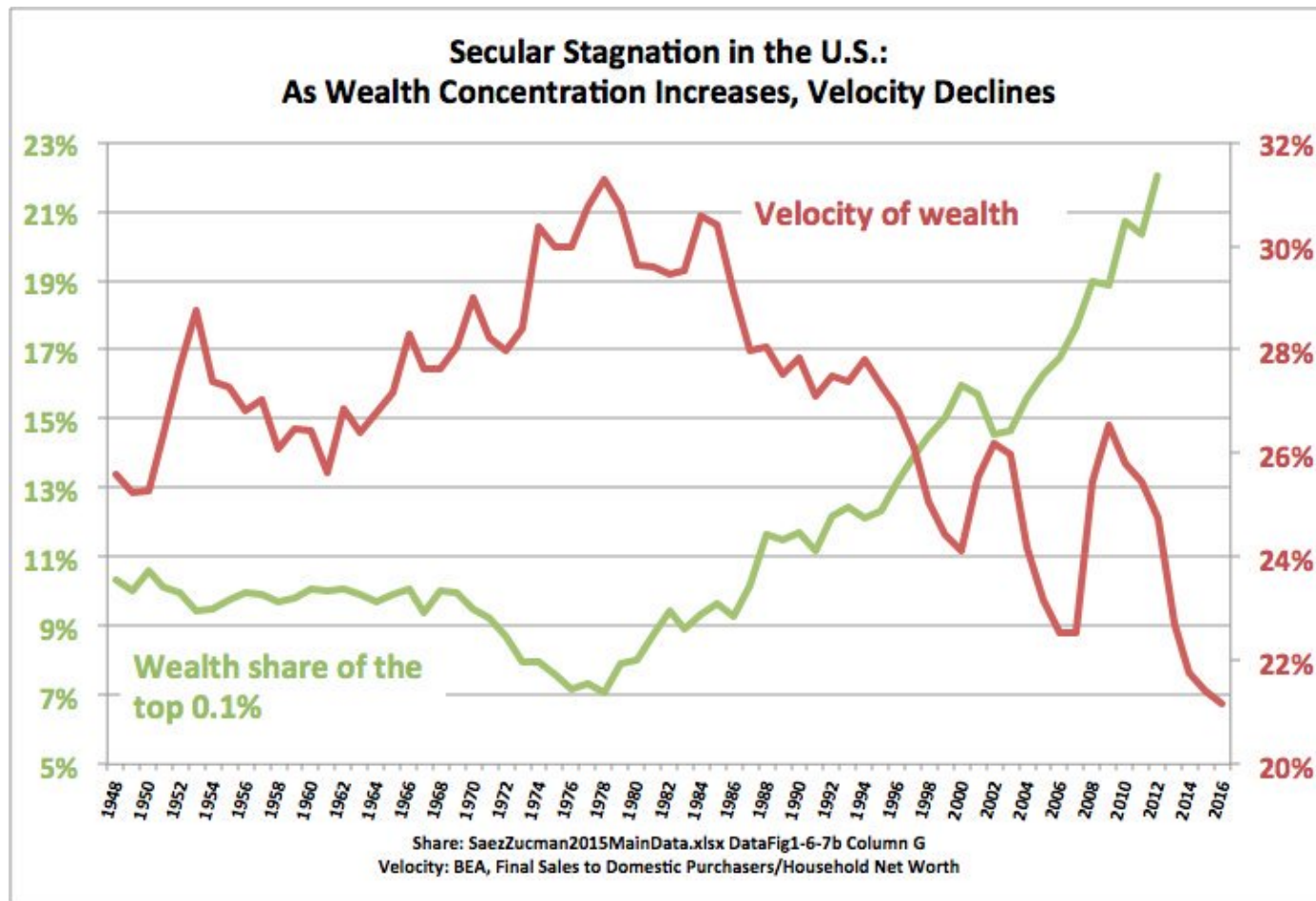
“Capital” gains do not even appear in the NIPAs, nor is any meaningful measure provided by the Federal Reserve’s flow-of-funds statistics. Economists thus are operating “blindly.”

This is no accident, given the interest of FIRE sector lobbyists in making such gains and unearned income invisible, and hence not discussed as a major political issue.

YOY Declines in Real HH Assets/NW Perfectly Predict NBER-Labeled Recessions



Secular Stagnation and Demand: Wealth Concentration and the Velocity of Wealth



Thanks For Listening

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