

Fiscal Designs, Money, Housing, and the U.S. Economy

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I Introduction

The federal tax system provides significant preferences for home ownership. Meanwhile, massive investment in highways gives rise to demand for larger lots and bigger homes.

Housing and related outlays today occupy greater share of family budgets in U.S.

Dramatic Post-WWII housing expansion and the way in which this expansion occurred have had profound, lasting negative effects on U.S. economy.

II Tax preferences for home ownership

1 a. Mortgage interest deductible under federal IIT

- for purchases of up to two residences, on up to \$1 million loan
(though imputed rents are not taxable)

Favors *investing* in housing over other investments

(This asymmetry entails efficiency and equity issues)

If seen as *consumption*, other consumer loans are not interest-deductible.

b. Interest on “home equity loan” deductible (On up to \$100,000 loan - home equity used as collateral.

Japan, Germany, France - compared

2 Deductible also are property taxes

- Though property taxes may be seen as “prices” for local govt. services

3. Preferences for capital gains

- a. No tax on up to \$500,000 of gains from a home sale (for joint filers (if primary residence during 2 of last 5 years); this can be repeated
- b. Tax-free death transfer of capital gains

4. Low Fuel Taxes

Federal gas tax (14 cents/gallon) remains unchanged since 1984 (while CPI rose 102%). Low, also, at State level (7.5 - 36 cents/gal.)

U.S. taxes by far the lowest among OECD nations. (Chart 1)

Tax expenditure estimates by budget function, 2007-2011 (Table 1)

Feldstein's remark (AER, Proc.) on fiscal variables in most macro models

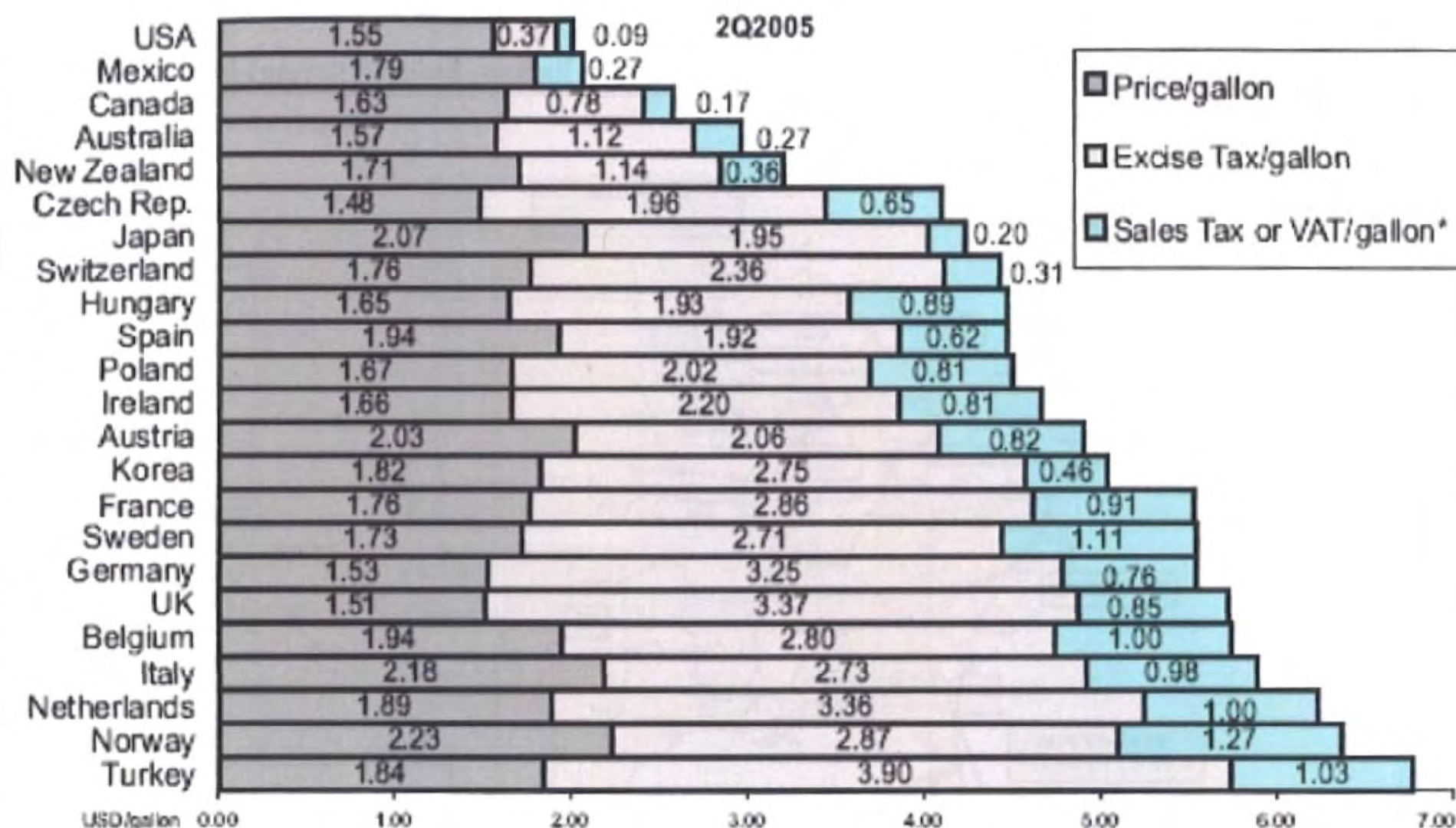
5. Current Debate on Tax Reform

Deductibility of mortgage interest and property taxes

Higher marginal rates on Ind. Income Tax

Their implications on housing in U.S.

Chart 1 International Unleaded Gasoline Prices and Taxes



* For U.S., nonexcise taxes included in retail price such as state and local sales taxes and underground storage tank fees. Breakdown obtained from "American Petroleum Institute," Gasoline Taxes, August 2005.

[Http://www.api-ec.api.org/filelibrary/domestic_gasoline_taxes_9_6_05.pdf](http://www.api-ec.api.org/filelibrary/domestic_gasoline_taxes_9_6_05.pdf).

Source: International Energy Agency. Energy Price and Taxes, Vol. 2005, No. 2, pp. 1-521.

Table 1 Tax Expenditure Estimates by Budget Function, Fiscal 2006-2011
(Billions of dollars)

<u>Category</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	Total 2006-2011	Relative share
								(%)
Deduction for mortgage interest	69.4	73.7	79.9	85.2	90.5	101.0	499.6	63.7
Deduction for property taxes	19.9	16.8	14.3	14.2	13.9	27.9	107.0	13.6
Exclusion of capital gains on home sales	24.1	28.5	29.0	30.1	31.1	34.9	177.6	22.6
Total:	<u>113.4</u>	<u>119.0</u>	<u>123.2</u>	<u>129.5</u>	<u>135.5</u>	<u>163.8</u>	<u>784.2</u>	<u>100.0</u>

Sources: Estimates for Federal Tax Expenditures for Fiscal Years 2007-2011, Joint Committee on Taxation, U.S .GPO, Washington:2007, JCS-3-07, p. 27.; for fiscal 2006, _____, JCT, U.S.GPO, Washington: 2006, JCS-2-06, p.33.

III Gov't investment, others to affect housing

1. Aggressive Postwar inv. in highways (the I System)

Aimed for transport infrastructure, national defense; (evacuation, mobility of military personnel/assets). Powerful industry lobby (auto, oil, steel, rubber, highway construction, insurance industries)

Cumulative total ('56-'91) of 47,000 miles (75,000 km) at \$425 billion (2006\$), **not counting values of public land.**

I System maps (the U.S.; the Boston Area)

(Fig.1, Fig. 2)

- a. **I system goes deep into city centers**, gives people access to vast suburban land,. At lower land price, new homes use bigger lots, become larger and higher -valued
- b. **Pollution, congestion, and demographic changes** in cities make suburban homes more desirable.

Imbalance in U.S. priorities in public infrastructure – Many equate transport infra with highways (less of railways), even among academics (Aschauer, 23, 1989; Krugman, NYT, op. ed. Aug. 9, '10)

2. School funding that favors more ethnically homogeneous suburb further induces suburbanization.

Fig. 1 The Eisenhower Interstate System

Source: http://mapofusa50states.com/images/map_of_usa_50_states30.jpg

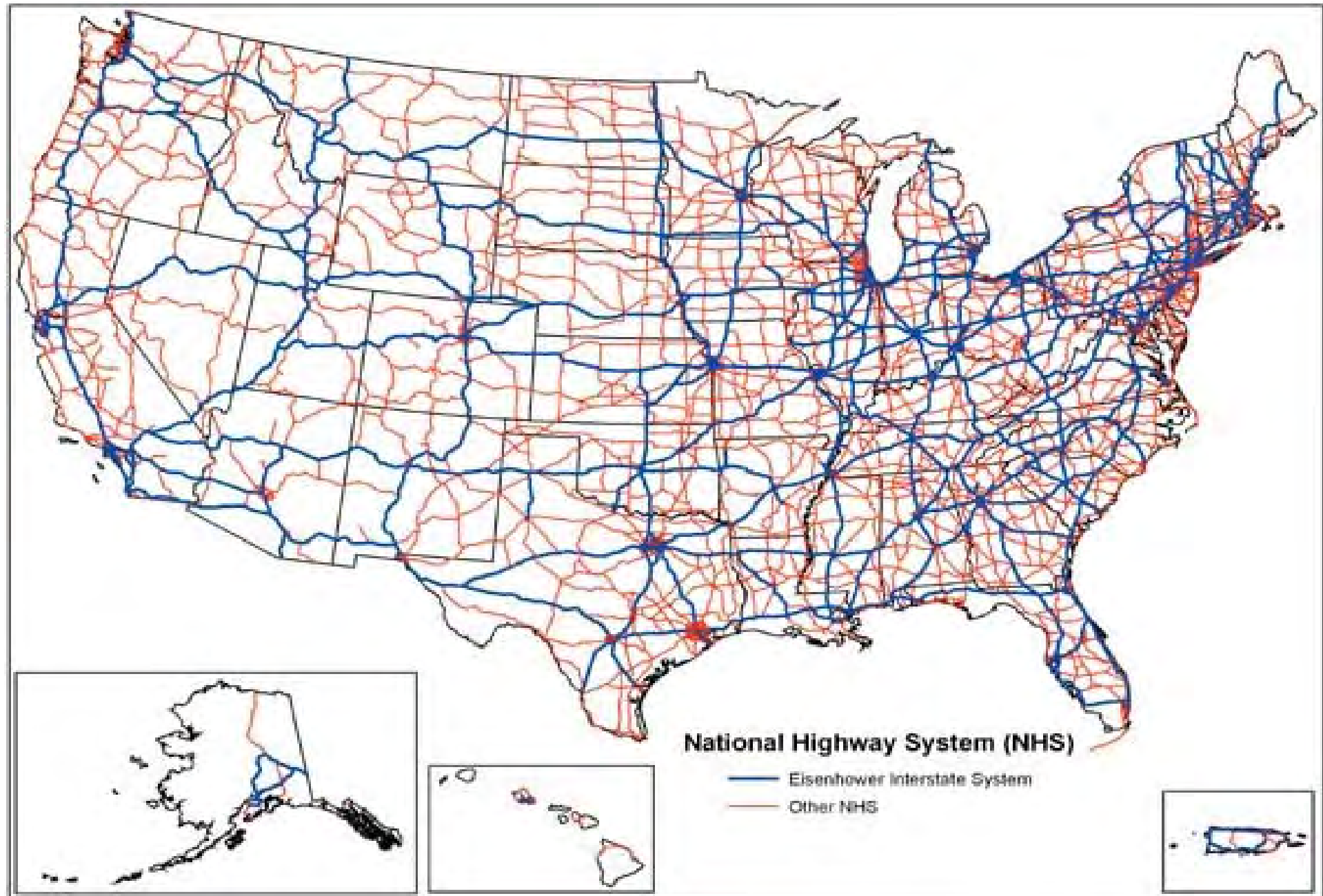
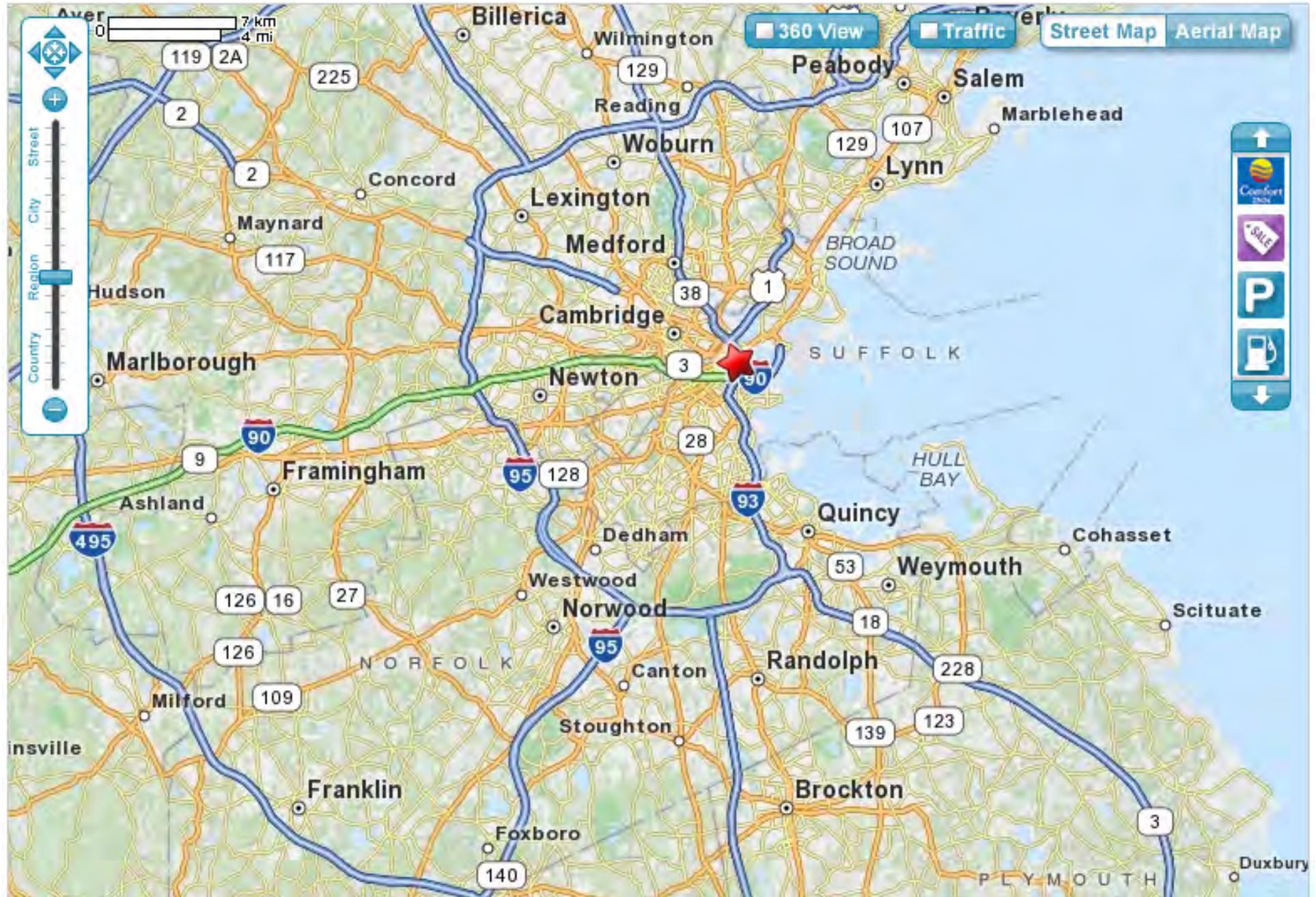


Fig. 2 The I System in the Boston Area



3. Monetary role

a. The Postwar easy money (except in the late Vietnam war/ oil shock years and the Paul Volker era) Low costs of money (on mortgage loans) greatly promote housing activities during the earlier Postwar decades, right through the decade of 1980s.

House price index and mortgage costs, 1950 – 2009 Table 2

Fed's over-extended low interest in the 2000s, in particular, contributed to a frenzy in the housing market, soon followed by a bust and the financial crisis.

b. The Role of Fannie and Freddie

These two largest buyers in the secondary mortgage market, gave banks more new funds for home buyers; this allowed low/middle income access to mortgage loans, adding fervor to the housing market. (Their subsequent reorganization and aggressive pursuit of profits, esp. during 2000s, had done a great harm to the mortgage market and beyond.)

Table 2 Consumer price index for housing and mortgage costs, 1950-2009

Year	CPI changes	FHFA house price index changes	New home mortgage cost ¹	Mortgage cost (real) ¹	After-tax mortgage cost (real) (5)= (4)x (1- t) (t=.25)	Federal funds rate (6)	Federal funds rate (real) (7) = (5) – (1)
	(1)	(2)	(3)	(4) = (3) – (2)			
1950	.98 ²					1.59 ³	.61
1955	-.37 ²					1.79	2.16
1960	1.72 ²					3.21	1.49
1965	1.61 ²					4.07	2.46
1970	5.72	4.81 ⁴	8.45	3.64 ⁴	2.73	7.17	1.45
1975	9.13	5.12	9.00	3.88	2.91	5.82	- 3.31
1980	13.50	6.65	9.56	2.91	2.18	13.35	-.15
1981	10.32	4.75	14.70	9.95	7.46	16.39	6.07
1982	6.16	1.64	15.14	13.50	10.12	12.24	6.08
1985	3.5	6.01	11.55	5.54	4.15	8.10	4.54
1990	5.40	.57	10.05	9.48	7.11	8.10	2.61
1995	2.83	4.61	7.87	3.26	2.45	5.83	3.00
2000	3.36	7.23	7.52	.29	.21	6.24	2.88
2005	3.39	11.17	5.94	5.23	3.92	3.22	-.17
2006	3.23	4.78	6.63	1.85	1.39	4.97	1.74
2007	2.84	.18	6.41	6.23	4.67	5.02	2.18
2008	3.86	-4.57	6.05	10.62	7.97	1.92	-1.94
2009	-.36	-4.39	5.14	9.53	7.15	.16	.52

Source: Figures on Col. (1) were calculated from Economic Report of the President, 2010., Table B-60. while Col.s (3) and (6) derive from ERP 2010, B-73. Col. (2) were calculated from Federal Housing Finance Agency- House Price Index, <http://fhfa.gov/webfiles/16506/2q10hpi.reg.txt> . ¹ Includes fees and charges. ² Calculated from ERP, 1983, Table B-60 .

³ Discount rates by FRB of New York were used in place of Federal funds rates which were not in use before 1955. ⁴ The 1970 estimate was derived based on the proportionality of the spread between the index and the mortgage yield for 1975.

IV Effects on the U.S. Economy

1. Suburbanization of urban homes (note again the tax designs, massive highways, easy money, local housing codes)
 - a. *Private cars* become necessity for many as urban transport
 - b. *Rapid decline in mass transit*, railways, in particular
(By 1966, intercity railway passengers were not even 2% of all the travelers.)
2. Growing demand for energy (motor fuel; oil/gas for home heating/cooling)
 - a. Dependence on foreign oil - a main cause for U.S. structural trade deficits.
Oil imports as ratio of trade deficits 1970-2008. (Table 3)
 - b. Macroeconomic instability from oil supply shocks

Table 3 Oil Imports as Percent of Trade Deficits, 1970- 2008
(Billions of dollars)

Year	<u>Oil Imports</u>	<u>Trade deficits</u>	<u>Oil imports/ Trade deficit Ratio</u> %
1970	2.9	28.1	10.3
75	27.0	8.9	303.3
80	79.5	25.4	313.0
85	51.4	122.0	42.1
90	62.3	111.0	56.1
95	56.0	174.2	32.1
2000	120.3	454.7	26.5
05	251.9	790.9	31.8
08	453.3	840.2	54.0

Sources: Trade balances calculated from *Economic Report of the President*, 2010, Table 106; Oil imports data from ERP, 2010, Table 104).

3. Higher costs of local infra (roads, utilities), public schools, and higher operating outlays in sprawling suburb (police/fire, school bus, sanitation, snow removal)
- Leap-frogging suburbs scatter schools in small sizes, resulting in loss in school cost efficiency. (Riew, REStat)

Loss from wasted private sector infra also -- Glut of shopping areas (buildings, parking lots, feeder roads) while downtowns decay

- Market mechanism would undo the excess eventually, but much wastes occur over extended periods of disequilibrium. (Riew, JRS)

4. Low personal savings in U.S.

a. Larger outlays on housing

U.S. median home value as ratio of median HH income, '70-'00 (Table 4)

(*Median home value* rose by 83.2% over 3 decades (1970-2000) while *median income* rose by a mere 25.2%. The median home value as multiple of the median income rose from 182% to 267% in the same period)

b. Higher expenses on complements to housing (cars/fuel, utilities, furn.)

Multiple cars (for most homes) require more fuel, larger garages

c. More local taxes (to cover higher local expenditures cited above)

Table 4 Median Home Value and Median Household Income, 1970-2000
(in constant dollars)

	Home value	% increase	HH income	% increase	H. value/Income
	(<u>2000 dollars</u>)	<u>over '70</u>	(<u>2005 dollars</u>)	<u>over '70</u>	Ratio
	(1)	(2)	(3)	(4)	(1)/(3)
					%
1970	65,300		35,832		182
1980	93,400	43.0	38,649 ('79)	7.9	242
1990	101,100	54.8	39,679 ('91)	10.7	255
2000	119,600	83.2	44,853	25.2	267

Sources: U.S. Bureau of Census (Inflation-adjusted using the appropriate
PI-U-RS adjustment factor.)

5. The tax preferences: a major factor in the financial crisis

Tax designs favoring housing activities and the expectation that strong housing market continue led home buyers and banks to “exuberance,” in the 2000’s, eventually to the housing market collapse and the financial crisis.

Aggravating the crisis: “Innovators” of mortgage-backed derivatives (many repackaged, adding to complexity) and unsuspecting investors

6. The tax preferences: a main cause for U.S. structural budget deficits

Revenue loss (from the deductions and exclusions) are a major contributing factor for U.S. budget deficits – make up more than half of deficits in normal years.

7. Welfare loss from housing price distortion

Deadweight loss from housing price distortions likely substantial, given high shares of the housing expenditure in most household budgets.

(Housing capital, broadly defined, accounts for well over 50% of U.S. capital stock.)

V. Concluding Remarks

Rationales for subsidized home have been:

Decent shelters elevate worker productivity.

Home-owners are more likely to vote, participate in civic affairs

But, are *current levels* of tax preferences justified?

We see merits in restraints, may consider the following:

1. a. Cap (limit) deductibility of mortgage interest
- b. Cap also deductibility of property taxes, or eliminate it altogether.
- c. Cap (or eliminate) tax-free death transfer of cap gains, but use indexation (to adjust for inflation – the fictitious gain)
2. Higher fuel taxes, to more fully account for costs of highway (constr. costs and imputed rents on land) and user externalities

3. Restraints on highway construction – A possible moratorium on new major arteries (with rigidly defined exceptions)
4. Active federal support of rapid development and upgrading of mass transit, railways, in particular, in urgent need
 - Efficiency of railways (on fuel and CO₂ emissions) and redressing the past neglect of the rail sector justify the policy shift.

“We are all utility maximizers,” one might argue, “If people want bigger houses, why should we be concerned?” Decisions by policy makers affect components and the range of options available to us and influence our choices.

Postwar U.S. experiences can be a lesson for many emerging economies.