Examining a Change to a National Retail Sales Tax Regime: Impact on Households

Draft Position Paper

Decisions and Ethics Center
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1. Summary of Main Findings

The Decisions and Ethics Center at Stanford University investigated the impact on households of a change from the current tax regime to the national retail sales tax (NRST) proposed by Americans for Fair Taxation. Our study focused on individual families over their remaining lifetimes rather than statistical aggregates in a single year. Our analysis yielded several major conclusions regarding the impact on families of a change to the NRST tax regime.

The current tax code is complex and there is probably no change that can guarantee that everyone will be better off. However, we find that most families will enjoy higher real lifetime consumption under the NRST than under the current regime. This is due to several factors including lower tax burdens on many households; lower compliance costs, lower marginal tax rates, and increased economic growth and efficiency.

Some wealthier seniors may experience a reduction in purchasing power under the NRST. However, their own financial well-being may not be the only issue they consider in their decision to support any tax regime. Other factors, such as the effect on their grandchildren or on the poor, may take precedence in their decision.

This paper highlights the following points:

- Middle-class families will tend to be financially better off under the change.
- Existing homeowners tend to benefit under the change, despite the removal of the mortgage interest deduction. This is due to an increase in the value of existing owner-occupied homes, and an increase in the affordability of existing mortgages.
- Low-income families will tend to be financially better off under the change. This is because they receive rebates that cover the amount of tax they pay at poverty level, so they effectively pay no federal tax under the change.
- Younger households will tend to be financially better off after the change, benefiting from improved economic conditions over their entire careers.
- Middle- and lower-income seniors will tend to do better financially under the change, with the rebate more than making up for any loss in after-tax purchasing power of social security and pension benefits.
- Some wealthier seniors will tend not to benefit from the redistribution of the tax burden. This is because wealthier seniors have a larger portion of financial assets whose after-tax purchasing power may fall under the new regime. However, for many seniors the removal of income taxes on asset earnings and retirement account disbursements, along with the repeal of the estate tax more than makes up for any initial loss in asset values.
- Incentives for work and savings will tend to be higher under the new regime - over twenty- percent higher for many households. This is primarily due to the replacement of high marginal income tax rates with a flat rate on consumption.

- Considered over a lifetime, the progressivity of the NRST is similar to that of the current income tax regime. The progressivity of the NRST is achieved through use of a rebate and replacement of regressive payroll taxes.

2. Study Methodology

Our goal was to translate the economic effects of a change in the tax regime into understandable impacts on individual households. Traditional methodologies, which examine statistical averages and aggregate very different households, lack vital data and often do not reveal important and key information. In our analysis, we chose to focus on specific households, considering the impact of the actual tax code. We varied individual household characteristics to ensure that our conclusions were robust.

Additionally, we examined households over their remaining lifetime rather than focusing on a single year. We measured the impacts of the change in tax regimes in terms of the household's remaining real lifetime consumption.

Taxes affect the household either directly, or indirectly through the economy (see figure 1 below). Direct taxation on the household includes individual income taxes (including the earned income tax credit), property taxes, and the employee portion of payroll taxes.

Indirect taxes are collected from businesses (corporate income taxes, the employer portion of the payroll tax, sales and service taxes, excise taxes, corporate property taxes, etc.). Businesses serve as intermediaries between workers, investors, and consumers. So all indirect taxes and other costs on business are ultimately paid by households: through reduced wages and benefits, lower investment returns, and higher prices. Economists cannot agree about how the indirect tax burden is allocated among these three economic activities. However, it is certain that households ultimately pay all indirect tax and other costs.

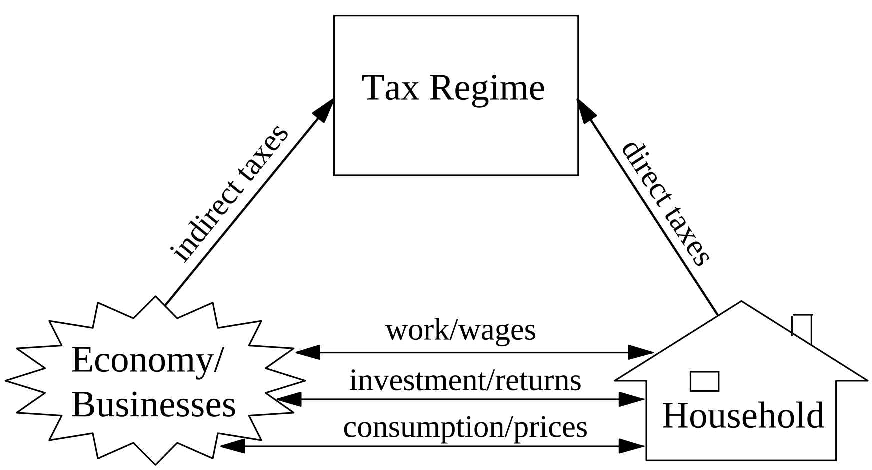

Figure 1. All Taxes Fall on Households

In addition to the visible tax revenues collected by government, there are several effects of taxation that are less visible. These include seigniorage (the inflation tax), compliance burden of the tax code, economic distortions, and slower economic growth.

3. Economic Assumptions

Our base case economic assumptions include a 3% inflation rate under the status quo, incidence of direct taxes entirely on the household, incidence of corporate income and employer payroll taxes distributed by value share between workers and investors, NRST distributed two thirds to consumers and one third to workers and investors (by value share), a 2% increase in economic efficiency (real purchasing power) from lower compliance costs, a 1% increase in economic efficiency from other economic effects such as lower marginal tax rates, and a one half of one tenth of one percent increase in real wage growth under the NRST. We varied these base case assumptions to ensure the robustness of our results.

Related to these economic assumptions are policy decisions. One important policy choice is whether transfer payments such as Social Security and Supplemental Security Income will be indexed to a consumer price index, which includes the NRST. Throughout this analysis, we have assumed that these transfer payments will be indexed to a consumer price index, which does not include the NRST.

4. Effects on Typical Households

We began our study with an analysis of the finances of a typical middle-class family, the "Cleavers." The Cleavers are a married couple, aged 40. They own their home and are struggling to meet their mortgage payments while raising their two children (ages 10 and 11). Both parents are employed outside of the home. Some key financial information about the Cleavers is shown in table 1 below.

Table 1

The Cleavers' 1998 Household Financial Snapshot
(in 1996 dollars)

Budget Item	Amount
Household Gross Wages	$46,440
Value of Employer-Provided Health Care Plan	$4,800
Taxable Investment Earnings	$ 615
Visible Income, Employee Payroll, and Property Tax Burden	($10,680)
Income Remaining for Mortgage, Charity, and Other Household Consumption and Savings	$36,369
Mortgage Payments	($8,385)
Charitable Contributions	($ 471)
Value of Employer-Provided Health Care Plan	($4,800)
Other Household Consumption	($24,450)
Remaining Income for Savings	$3,060
Employer Contribution to Tax-Deferred Retirement Savings Plan	$ 929

In figure 2 below, we find that families with the Cleavers' household profile are financially better off under the NRST regime. Even over a wide range of incomes — from poverty level, about sixteen thousand dollars per year for the Cleavers' family of four, to the higher income levels — families with this profile are better off than under the current income tax regime.

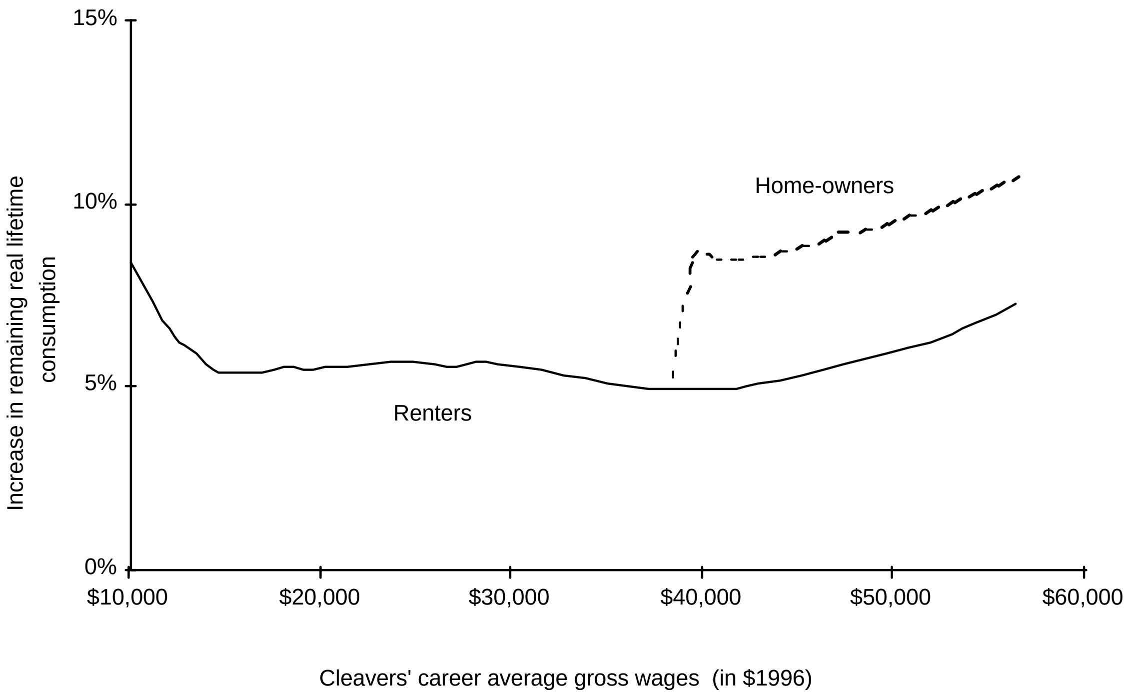

Figure 2. Lifetime Improvement under NRST for the Cleavers

A combination of factors including lower tax burdens, lower compliance costs, lower marginal tax rates, and increased economic growth and efficiency would allow middle-class families like the Cleavers to enjoy higher real lifetime consumption under the NRST than under the federal income tax.

In figure 2, the solid line represents Cleavers who have chosen never to purchase a home. Only Cleavers with average career income above about forty thousand dollars per year are considered homeowners in this graph.

Effect on Homeowners

One issue of concern to many middle-class households is the effect of the change on the value of their homes. Because the sales tax only applies to new homes, the market value of owner-occupied homes would increase under the new tax regime (to the point where newly constructed homes are not at a disadvantage from the viewpoint of prospective homebuyers).

Also, homeowners with fixed-rate mortgages will find mortgage payments easier to make under the NRST regime. This is because if enough of the NRST falls on consumers, then after-tax consumer prices would rise to some extent. So mortgages could be paid off with dollars that are worth less.

It is also possible that mortgage interest rates would decline, which would further benefit existing and prospective homeowners (though this effect is not included in our base case analysis). Since middle-aged families often already own their homes and tend to have substantial outstanding fixed-rate mortgages, they will be relatively better off under the NRST regime. Figure 2 (previous page) illustrates the relative improvement of current homeowners.

5. Variations with Income

Low-income Households

The critical factor in examining low-income households is the amount of government subsidies (including transfer payments) that they receive. These include Supplemental Security Income, food stamps, etc.

The working poor not receiving government subsidies will tend to be better off under the NRST regime. This enhancement of their financial condition is due to the rebate system in the NRST, which effectively exempts the working poor from paying the NRST. In addition, the repeal of the payroll tax allows this group to take home their entire paycheck and avoid the substantial payroll taxes (less earned income tax credit) that they face under the current federal income tax. Figure 3 below illustrates the impact of the NRST on low-income families with characteristics similar to the Cleavers.

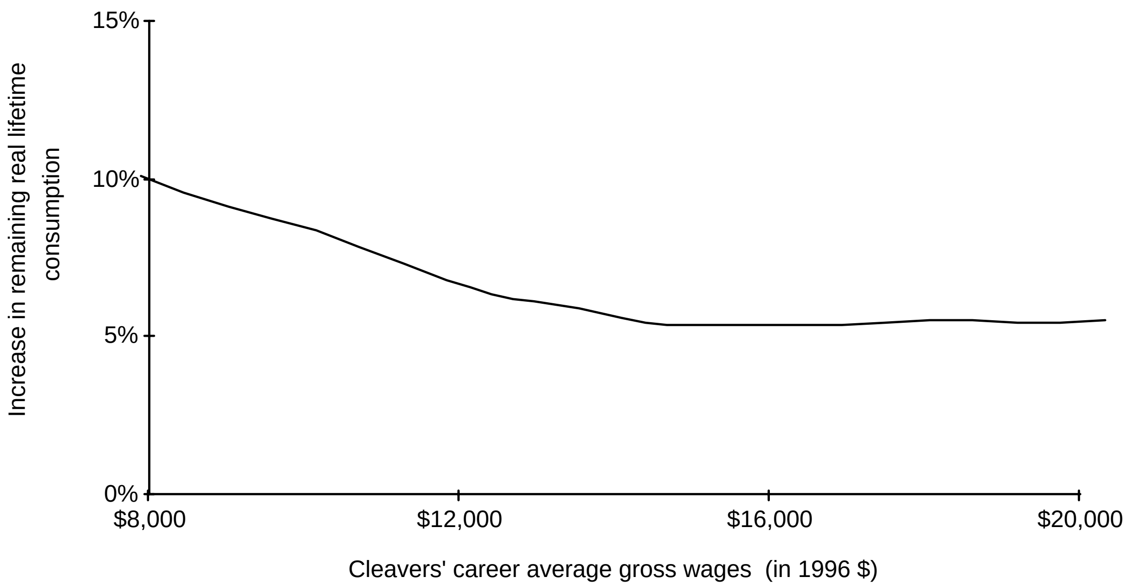

Figure 3. Lifetime Improvement under NRST for Low-Income Cleavers

For purposes of this analysis, government transfer payments (such as food stamps, Supplementary Security Income, Medicaid, etc.) were indexed to a consumer price indicator that does not include the NRST. Under this assumption, the purchasing power of government subsidies for low-income households will be reduced under the NRST regime. However, the NRST rebate makes up for this loss, allowing families at low incomes to be either roughly even or better off.

Figure 4 illustrates the Williams family, a low-income family with four children. A significant portion of the Williams' household income is derived from government subsidies. Figure 4 below shows the impact of the NRST on the Williams over a range of earnings. Even if they currently receive government subsidies sufficient to bring them to 100% of poverty line consumption (about $22,000 annually for the Williams family of six), they will be roughly even or financially better off under the NRST. At any lesser subsidy level, the rebate feature of the NRST further improves the Williams' financial situation, since it more than compensates them for their federal tax.

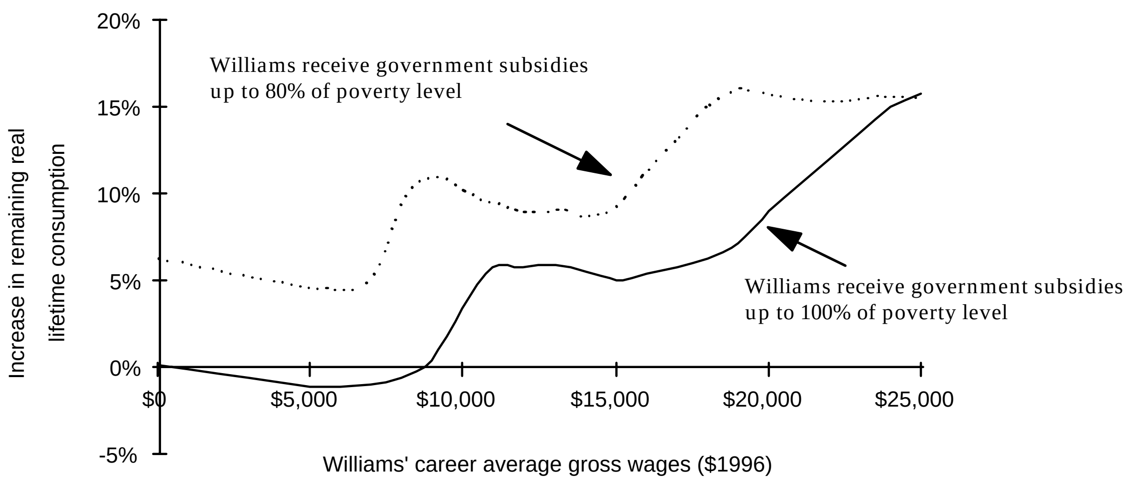

Figure 4. Lifetime Improvement under NRST for a Low-Income Family Receiving Government Subsidies

High-Income Households

Working households with higher incomes will no longer be subject to progressively higher marginal income tax rates, and will tend to improve under the NRST regime. The top end of the Cleavers' graph in figure 2 illustrates their improvement.

6. Variations with Age

We found that age is an important factor in determining the impact of the NRST on households.

Young Households

Younger households, as illustrated by the Juniors, will tend to be financially better off after the change. The Juniors are a married couple, aged 25. They both work, and hope to buy a home and start a family someday. They are just now beginning their careers, and would experience most of their working lives under the new regime.

A combination of factors including lower compliance costs, lower marginal tax rates, and increased economic growth and efficiency would allow younger families like the Juniors to enjoy higher real lifetime consumption under the NRST than under the federal income and payroll tax regime. Figure 5 below illustrates the improvement in lifetime consumption for the Juniors over a wide range of income levels.

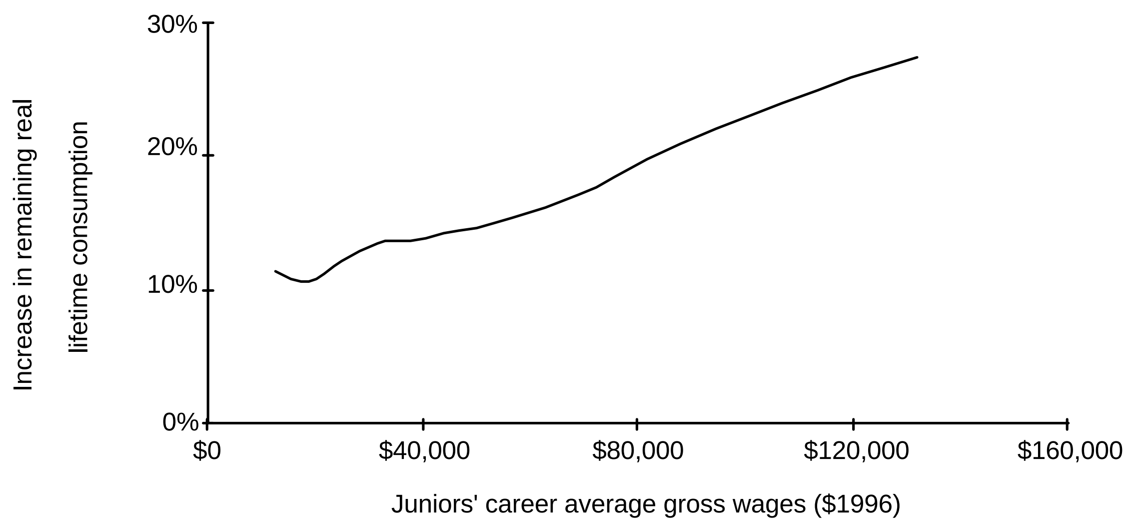

Figure 5. Lifetime Improvement under NRST for a Young Family

Elderly Households

The Seniors represent a typical retired couple. We find that the impact of the NRST depends critically on the amount and composition of their savings. Some wealthier seniors will tend not to benefit from the redistribution of the tax burden. This is because wealthier seniors have a larger portion of financial assets whose after-tax purchasing power may fall under the new regime.

However, for many seniors the removal of income taxes on asset earnings and retirement account disbursements, along with the repeal of the estate tax more than makes up for any initial loss in asset values. Elderly couples with moderate or limited financial resources will tend to be better off under the NRST, with the rebate overwhelming any loss on their savings. For those with estates over one point two million dollars, the removal of estate taxes may more than make up for any loss of the estate's purchasing power.

Figure 6 below shows these effects on the Seniors. As a point of reference, the median family net worth for a household with a family head between sixty-five and seventy four years of age in 1992 was one hundred three point six thousand dollars. (*Federal Reserve Bulletin*, October 1994.)

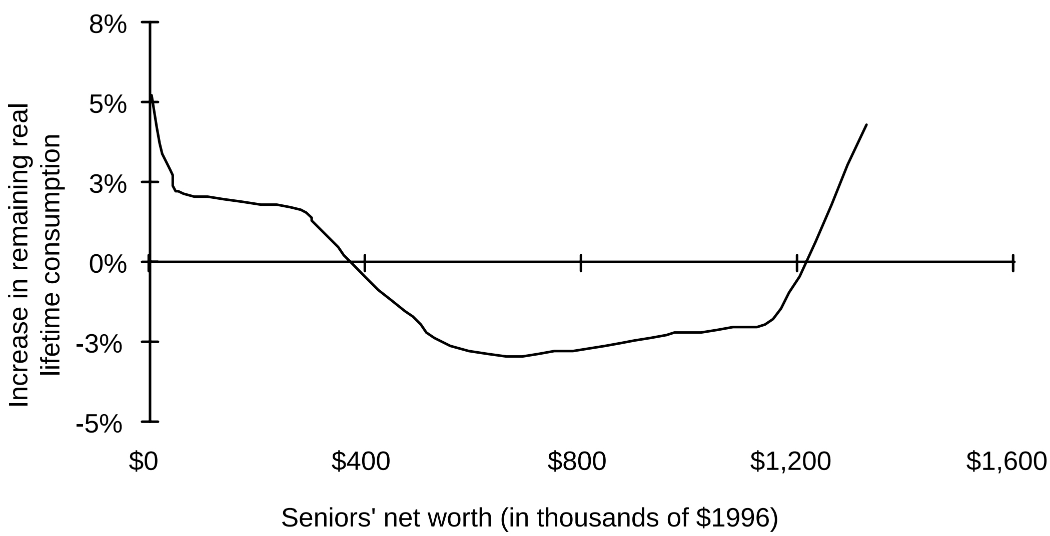

Figure 6. Lifetime Effect of NRST for the Seniors under a Range of Financial Profiles at Retirement

The Seniors' asset composition is an important factor in determining the impact of the NRST. Because the sales tax only applies to new homes, the value of the elderly's home equity would tend to increase under the new tax regime. Also, portfolios with a higher proportion of their wealth in tax-deferred status (such as in IRA's and 401k plans) and in unrealized capital gains would do relatively better under the NRST, since they will no longer be subject to federal income tax.

While some seniors may experience a reduction in purchasing power, their own financial well being might not be the only issue they consider in their decision to support any tax regime.

Other factors, such as the effect on their grandchildren or on the poor, may take precedence in their decision.

7. Effects on Marginal Tax Rates

Under the NRST regime, marginal tax rates on work and savings will be substantially lower for many households, increasing their incentives to work and save. This is primarily due to the replacement of high marginal income tax rates with a flat rate on consumption.

Figure 7 below shows that the incentives for work increase by over twenty percent for many families, depending on their earnings. On an economy-wide level, these improved incentives lead to higher economic growth and efficiency.

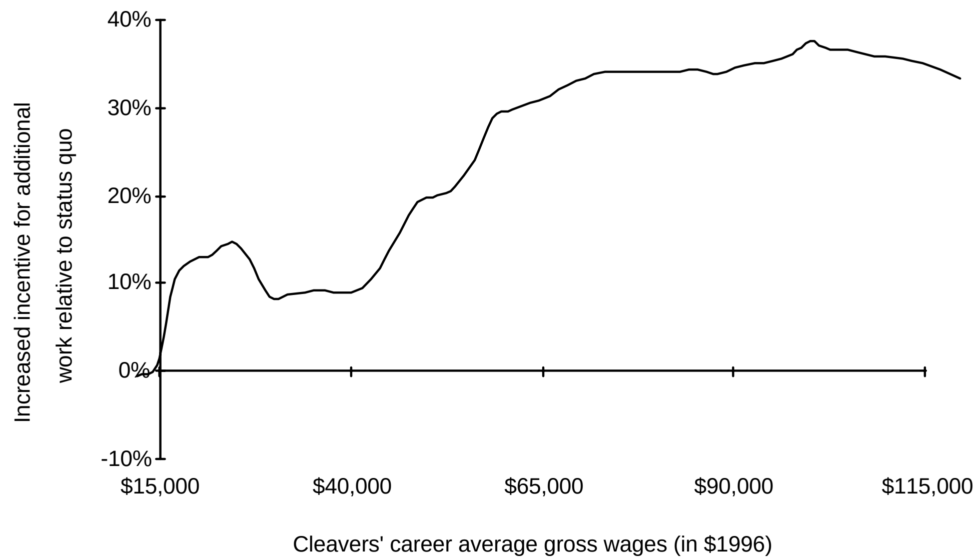

Figure 7. Impact on Cleavers' Marginal Incentives to Work

8. Regressivity Analysis

There is a common perception that consumption taxes are regressive, which would be supported in a myopic single-year analysis of the tax system.

The argument is that

> In a given year wealthy people save a higher fraction of their income than poor people, so the wealthy are paying a lower fraction of their income in consumption taxes.

However, a lifetime analysis reveals that most or all of the saved income of a household is eventually consumed in retirement or by the heirs, at which time it is subject to the consumption tax. So over a lifetime, a consumption tax — without a rebate — is roughly flat across income categories.

Under the NRST regime, a consumption tax is combined with a rebate, which refunds all taxes up to poverty-level consumption. This makes the NRST a progressive tax.

9. Conclusions

Because the combination of the current tax code and government subsidies is extremely complex, there is probably no change that can guarantee that everyone will be better off. But under the NRST regime, several factors including:

- a rebate which keeps the amount of taxes paid by most households similar to, or lower than the current income tax regime, and effectively exempts low-income households from the NRST,
- lower compliance costs,
- lower marginal tax rates and
- increased economic growth and efficiency

would allow most families to enjoy higher real lifetime consumption under the NRST than under the current federal income and payroll tax regime.

Some wealthier seniors may experience a reduction in purchasing power. However, their own financial well being might not be the only issue they consider in their decision to support any tax regime. Other factors, such as the effect on their grandchildren or on the poor, may take precedence in their decision.