Income gains and Month-to-Month Income Volatility

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Empirical Progression

High-frequency data
Households surveyed every 2-4 weeks

INCOME

ASSETS

CASH FLOW

244 Households
316,763 cash flows
100 spending categories
38 income types
69 financial instruments
Illiquidity vs. Insolvency
Garza Family Income, N. California

Turn to pawn shops, costly loans
Unpredictability and income level
Self-reports. US Financial Diaries

Unpredictable Portion of Household Income on Average, by Income Level

- Poor (< 100% SPM): 26.15%
- Near Poor (100%-150% SPM): 14.65%
- Moderate (150%-200% SPM): 8.55%
- Middle (> 200% SPM): 9.01%
Volatility and income level
Coefficient of Variation of Monthly household income. US Financial Diaries

Lowess of Volatility (CV) of Monthly Household Income on Income Level (as Percent of SPM)

bandwidth = .4
Income variability: Typical causes

US Financial Diaries

• **Work hours** rising and falling
• **Lumpy payments** (tax refunds, etc.)
• **Health problems** and **emergencies**
• **Predictable childcare and transportation needs** (with uncertain timing and size)
• **Shifting household membership**
<table>
<thead>
<tr>
<th>Robustness check</th>
<th>Income % of Supplementary Poverty Threshold</th>
<th>All</th>
<th>&lt; 100%</th>
<th>&gt; 200%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households Below 95&lt;sup&gt;th&lt;/sup&gt; Percentile of CV</td>
<td><strong>Average</strong></td>
<td>0.39</td>
<td>0.55</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Sample Size</td>
<td>231</td>
<td>64</td>
<td>53</td>
</tr>
<tr>
<td>All Households</td>
<td><strong>Average</strong></td>
<td>0.46</td>
<td>0.66</td>
<td>0.38</td>
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<tr>
<td></td>
<td>Sample Size</td>
<td>244</td>
<td>68</td>
<td>56</td>
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<tr>
<td>High-Grade Households</td>
<td><strong>Average</strong></td>
<td>0.36</td>
<td>0.48</td>
<td>0.31</td>
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<tr>
<td></td>
<td>Sample Size</td>
<td>124</td>
<td>28</td>
<td>29</td>
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<tr>
<td>Including Tax Refunds in Income</td>
<td><strong>Average</strong></td>
<td>0.51</td>
<td>0.62</td>
<td>0.42</td>
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<tr>
<td></td>
<td>Sample Size</td>
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<td>60</td>
<td>52</td>
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<tr>
<td>Excluding Brooklyn Households</td>
<td><strong>Average</strong></td>
<td>0.37</td>
<td>0.51</td>
<td>0.33</td>
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<tr>
<td></td>
<td>Sample Size</td>
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<td>50</td>
<td>52</td>
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<tr>
<td>Month Starting on the 8th</td>
<td><strong>Average</strong></td>
<td>0.37</td>
<td>0.52</td>
<td>0.31</td>
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<tr>
<td></td>
<td>Sample Size</td>
<td>231</td>
<td>65</td>
<td>53</td>
</tr>
<tr>
<td>Spreading Week-Based Income</td>
<td><strong>Average</strong></td>
<td>0.38</td>
<td>0.55</td>
<td>0.31</td>
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<tr>
<td></td>
<td>Sample Size</td>
<td>231</td>
<td>64</td>
<td>53</td>
</tr>
<tr>
<td>Combined Robustness Checks</td>
<td><strong>Average</strong></td>
<td>0.32</td>
<td>0.41</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Sample Size</td>
<td>113</td>
<td>23</td>
<td>28</td>
</tr>
</tbody>
</table>
Self-reported month to month income variability

SHED - Federal Reserve, 2013 Survey of Household Economics and Decisionmaking (7/14)

“Often varies quite a bit from one month to the next”

“Some unusually high or low months”

SHED: Implemented in 9/2013. Nationally-representative sample. Online panel of 50,000 individuals sampled randomly. 6,912 asked to take the survey. About 60% (4,134) agreed. Quick survey (19 minutes median time)
Self-reported reasons for income variability

SHED - Federal Reserve, 2013 Survey of Household Economics and Decisionmaking (7/14)
Five spikes/dips per year on average

US Financial Diaries

- 25%

Average Income

+ 25%

2.6 Spikes

2.5 Dips
Spikes and dips
US Financial Diaries

Income Spikes or Dips
Per Household per Year

<table>
<thead>
<tr>
<th>Spikes</th>
<th>Dips</th>
</tr>
</thead>
<tbody>
<tr>
<td>44%</td>
<td>33%</td>
</tr>
<tr>
<td>24%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Mismatch: % of spending spikes where:

- Income is not a spike
- Income is below average

Effort to align income & spending spikes

→ Liquidity constraints

Mismatch of spending and income spikes

Income is not a spike
Income is below average