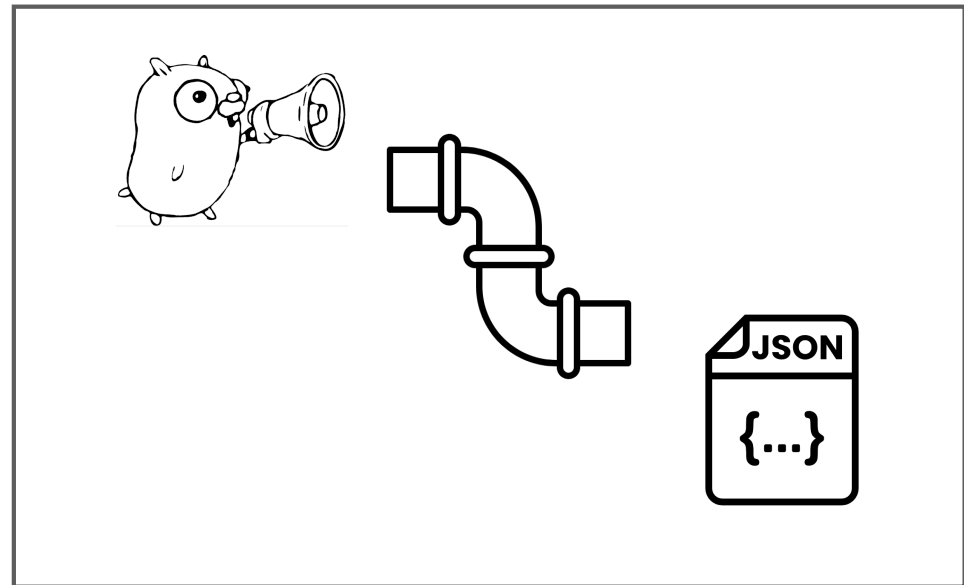


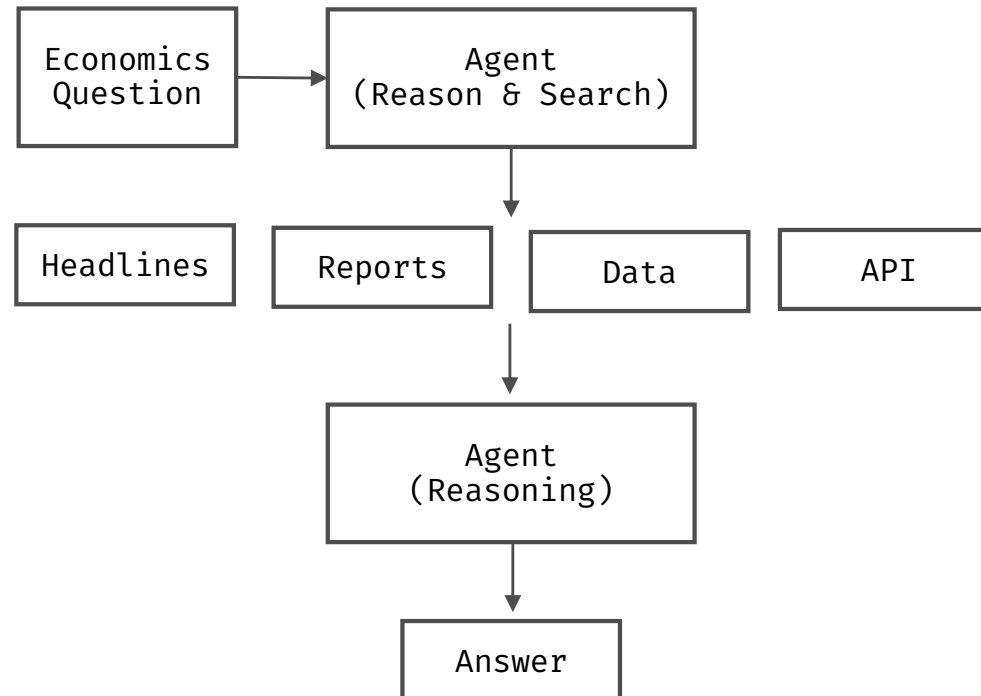
Unix Pipes Are Better Than Agents

DERICK SCHAEFER
Technology Leader, Developer, Author
Gopher Con 2026



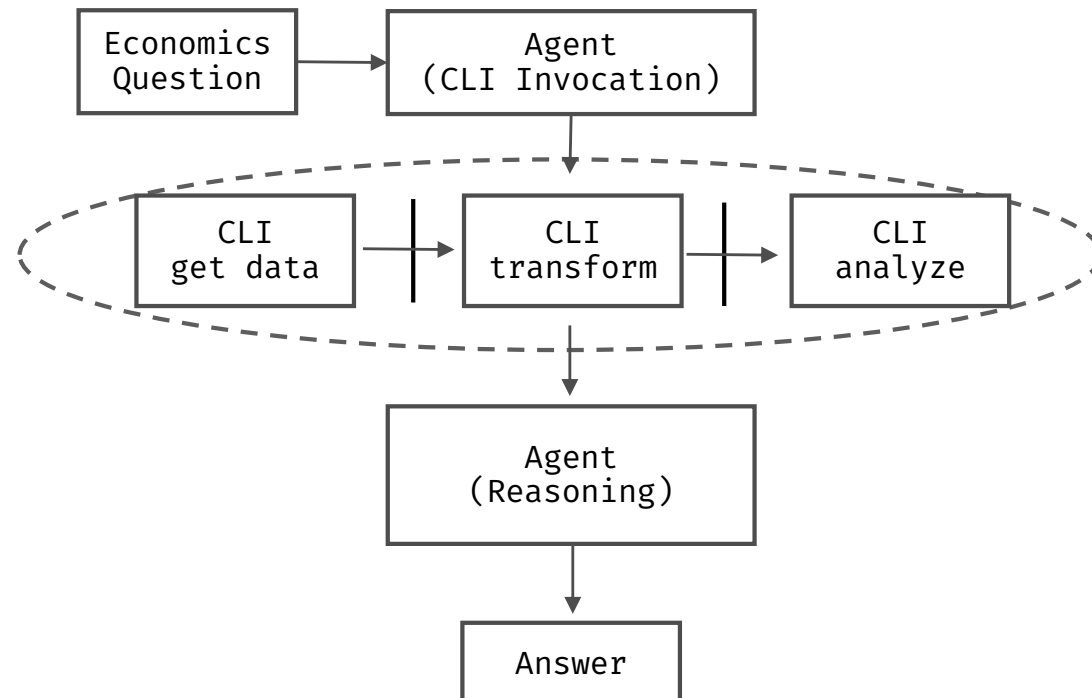
The Shifting Boundary (1)

> Agentic



The Shifting Boundary (2)

> Unix Pipe



Unix Philosophy

- > Do one thing well.
- >
- > Work well with others.



Reserve

Command Surface

Get Data

<noun> <verb>

reserve obs get
reserve series list
reserve release get

Transformation

<verb> <verb>

reserve transform pct-change
reserve transform normalize
reserve release get

Analysis

<verb> <noun>

reserve analyze summary
reserve analyze correlation
reserve chart bar

```
> reserve obs get | reserve transform pct-change | reserve analyze summary
```

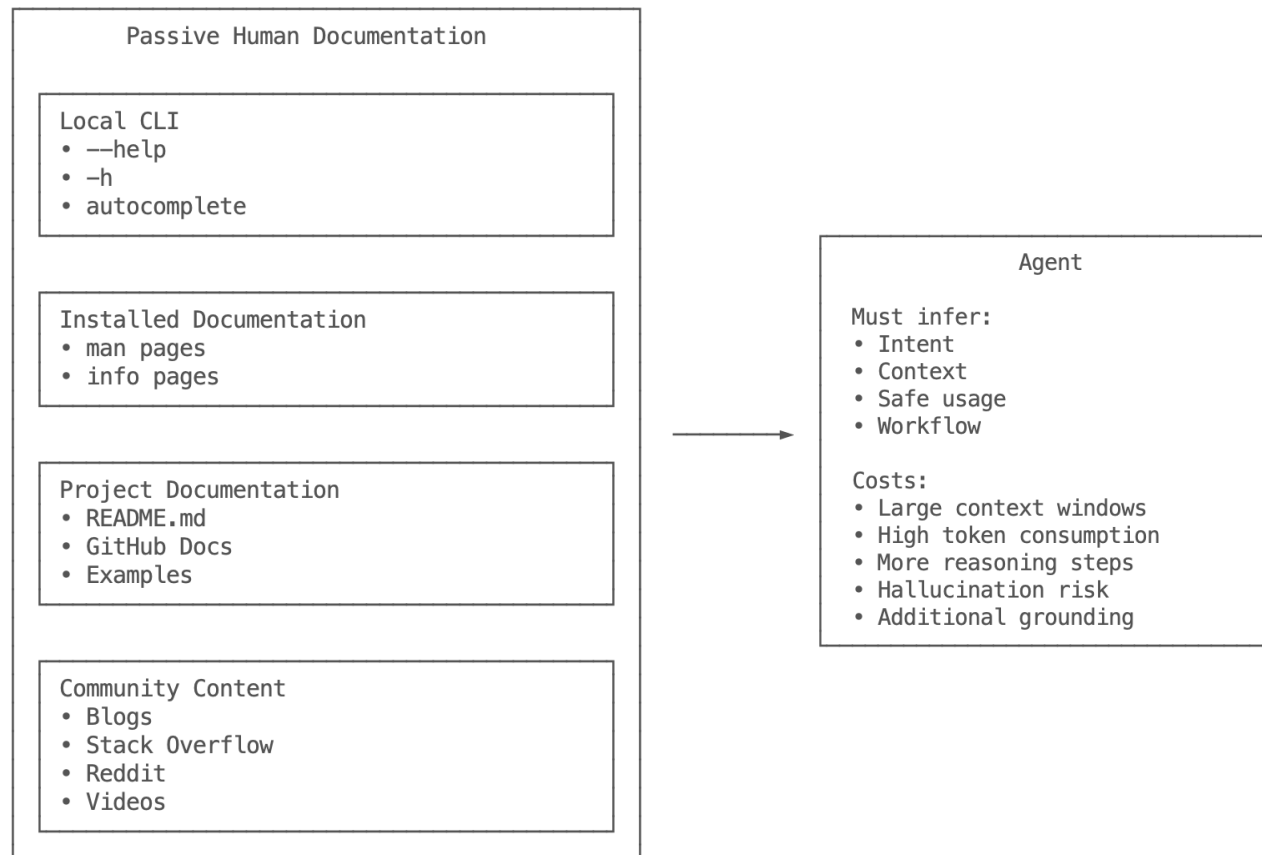


An Economics Assignment

Compare today's credit regime with 2010. . .



Documentation Problem (1)



Documentation Problem (2)



Precise Pipeline (1)

```
reserve obs get BAA10YM DRTSCLCC DRTSCILM \  
--start 2010-01-01 --end 2010-12-31 --freq q --format jsonl \  
| reserve analyze summary --by-series
```



Precise Pipeline (2)

```
$ reserve obs get BAA10YM DRTSCLCC DRTSCILM \  
> --start 2010-01-01 --end 2010-12-31 --freq q --format jsonl \  
[> | reserve analyze summary --by-series
```

SERIES	COUNT	MISS	MEAN	STD	MIN	MEDIAN	MAX	CHANGE PCT
BAA10YM	4	0 0.0%	2.8250	0.2317	2.5700	2.8400	3.0500	18.68%
DRTSCILM	4	0 0.0%	-7.9750	2.1562	-10.5000	-7.9500	-5.5000	-90.91%
DRTSCLCC	4	0 0.0%	-1.5000	9.0196	-10.0000	-2.5500	9.1000	-457.14%

Sources by series:

- BAA10YM: St. Louis Fed via FRED
- DRTSCILM: Board of Governors via FRED
- DRTSCLCC: Board of Governors via FRED



Token Conservation

reserve onboard --topic all

- 2,700 lines of JSON
- 30K words
- 200K characters
- Estimated 60K tokens required to process
- 3.6B potential token relationships

reserve obs get --ai-onboard

- 500 word average
- 1200 token average
- 21 commands sharing consistent JSON schema
- 98% reduction in token relationships



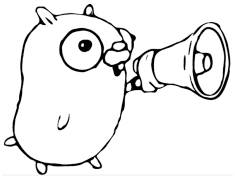
Conclusion (1)

> "Unix Pipes Are Better Than Agents."



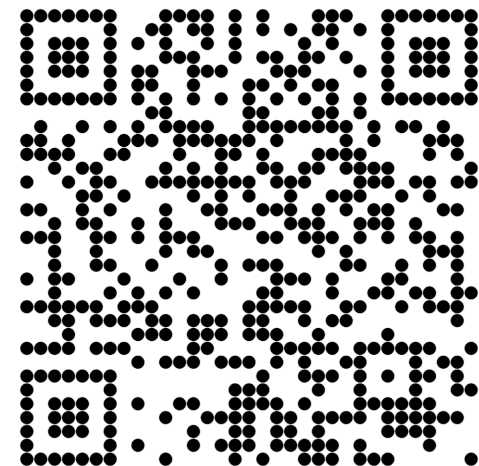
Conclusion (2)

> “Unix Pipes Make Better Agents.”



RESERVE & Repository Architecture Proposal Links

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<https://github.com/derickschaefer/>



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RESERVE Onboarding Approaches

Visual Studio Code or Claude Code

- Prompt the agent, “I am going to use RESERVE to get some data. Onboard yourself with `./reserve onboard -topic toc`

Claude or Chat GPT UI

- `reserve onboard export ./onboard <directory>`
- Upload the JSON files from <directory> into the project repo
- Prompt the agent to get up to speed on RESERVE

Command Level

- `reserve onboard obs`
- `Reserve onboard transform`
- `Reserve onboard chart`



Credit Regime Analysis

- **Credit spreads were narrower in 2025:** BAA10YM averaged about 1.71% in 2025 versus 2.83% in 2010, suggesting lower perceived credit risk or less compensation demanded by investors.
- **Bank lending standards were much tighter in 2025:** DRTSCILM moved from a mean of about -7.98 in 2010 to +10.18 in 2025, meaning C&I lending standards shifted from easing to tightening.
- **Consumer credit standards also tightened:** DRTSCLCC moved from about -1.50 in 2010 to +7.40 in 2025, indicating a clear move from looser to tighter credit-card underwriting.
- The overall regime shifted from a post-crisis, easing/repair backdrop in 2010 to a more selective, tighter-credit environment in 2025.

BAA10YM - Baa Corporate Bond Spread (10Y Treasury)

DRTSCILM - Banks Tightening C&I Loan Standards

DRTSCLCC - Banks Tightening Credit Card Standards

