

Changes In The Workforce And Their Impact On Workers' Compensation Outcomes

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January 11, 2024

About WCRI

- Not-for-profit public policy research organization on workers' compensation and health care issues
- Founded in 1983 in Cambridge, MA
- Mission
 - “Be a catalyst for significant improvements in workers' compensation systems, providing the public with objective, credible, high-quality research on important public policy issues.”
- Diverse membership—includes employers, insurers, state agencies, worker advocates, medical providers

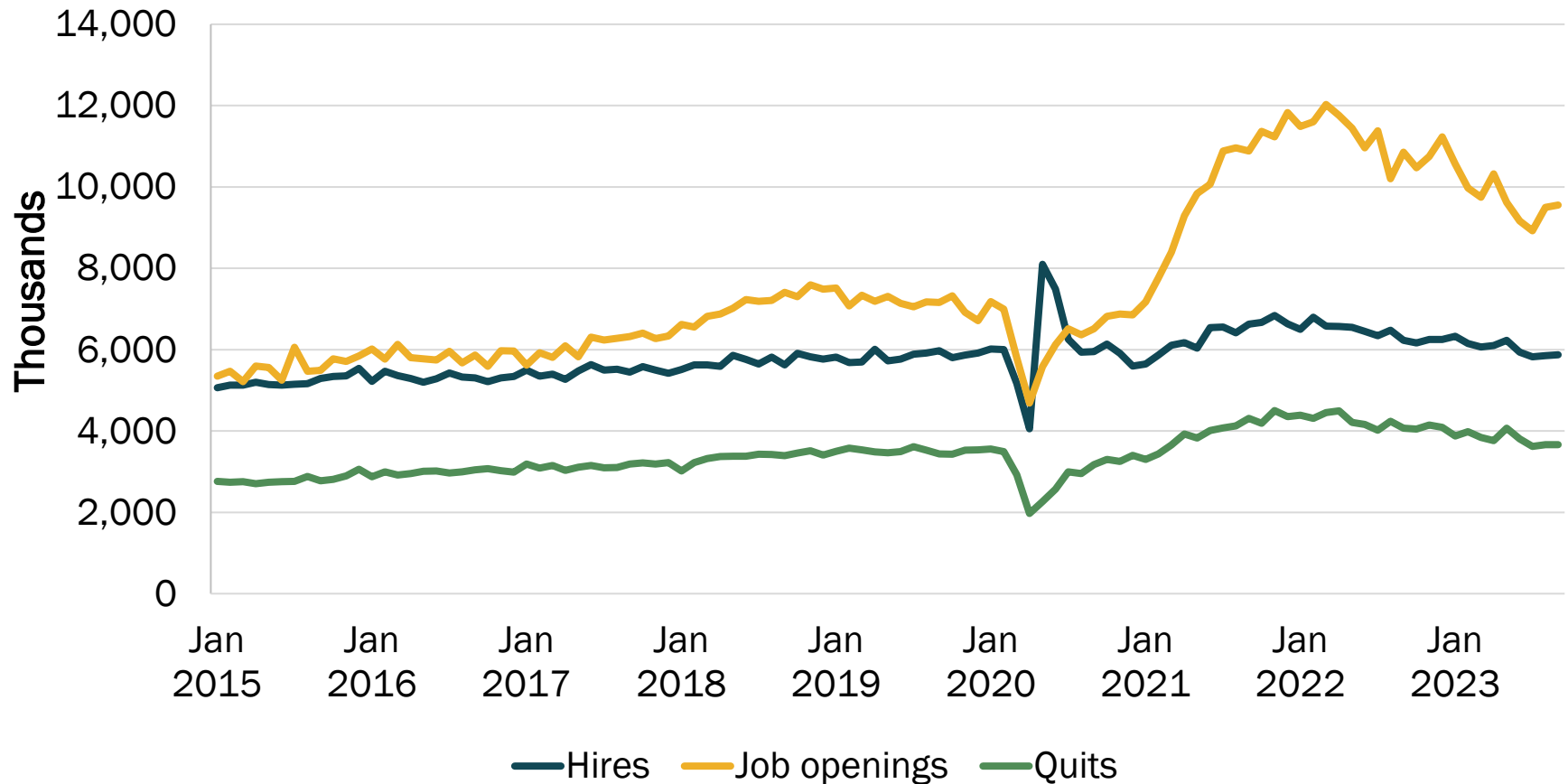
Economic Disruptions Prompted Changes In The Workforce, And Likely Impacted WC Claims

- U.S. economy experienced important recent disruptions:
 - High unemployment rates
 - Turbulent labor markets (job turnover, retirements)
 - Overall inflation and steep wage increases
 - Aging workforce
- Workforce will likely continue to be shaped by these factors, with impacts on workers' compensation outcomes

Research Questions

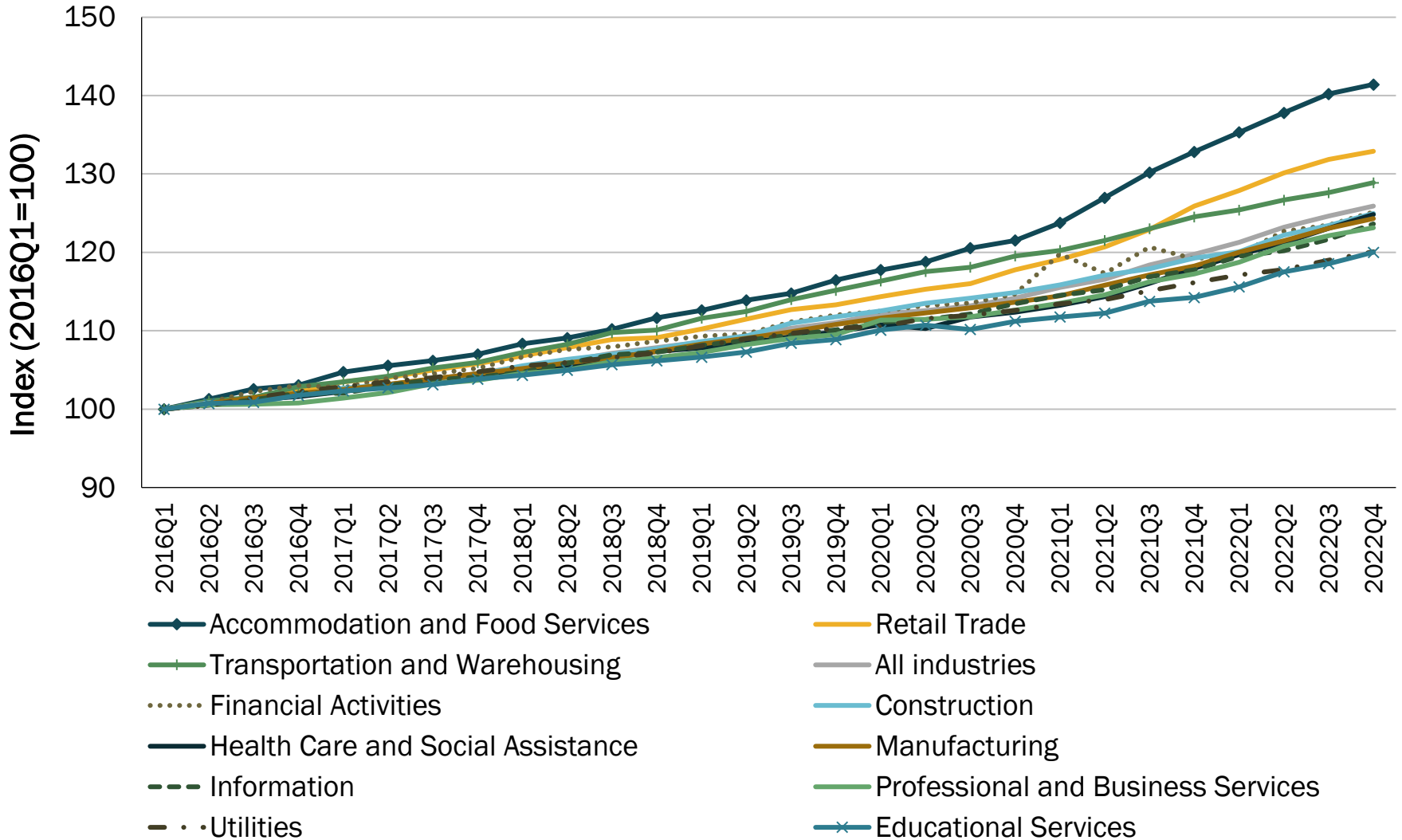
- *Looking back:* How have these workforce changes impacted duration of temporary disability and indemnity payments?
- *Looking forward:* What will be the likely impact of these workforce changes on duration of temporary disability and indemnity payments?

Increased Labor Demand After The Onset Of COVID-19 Pandemic



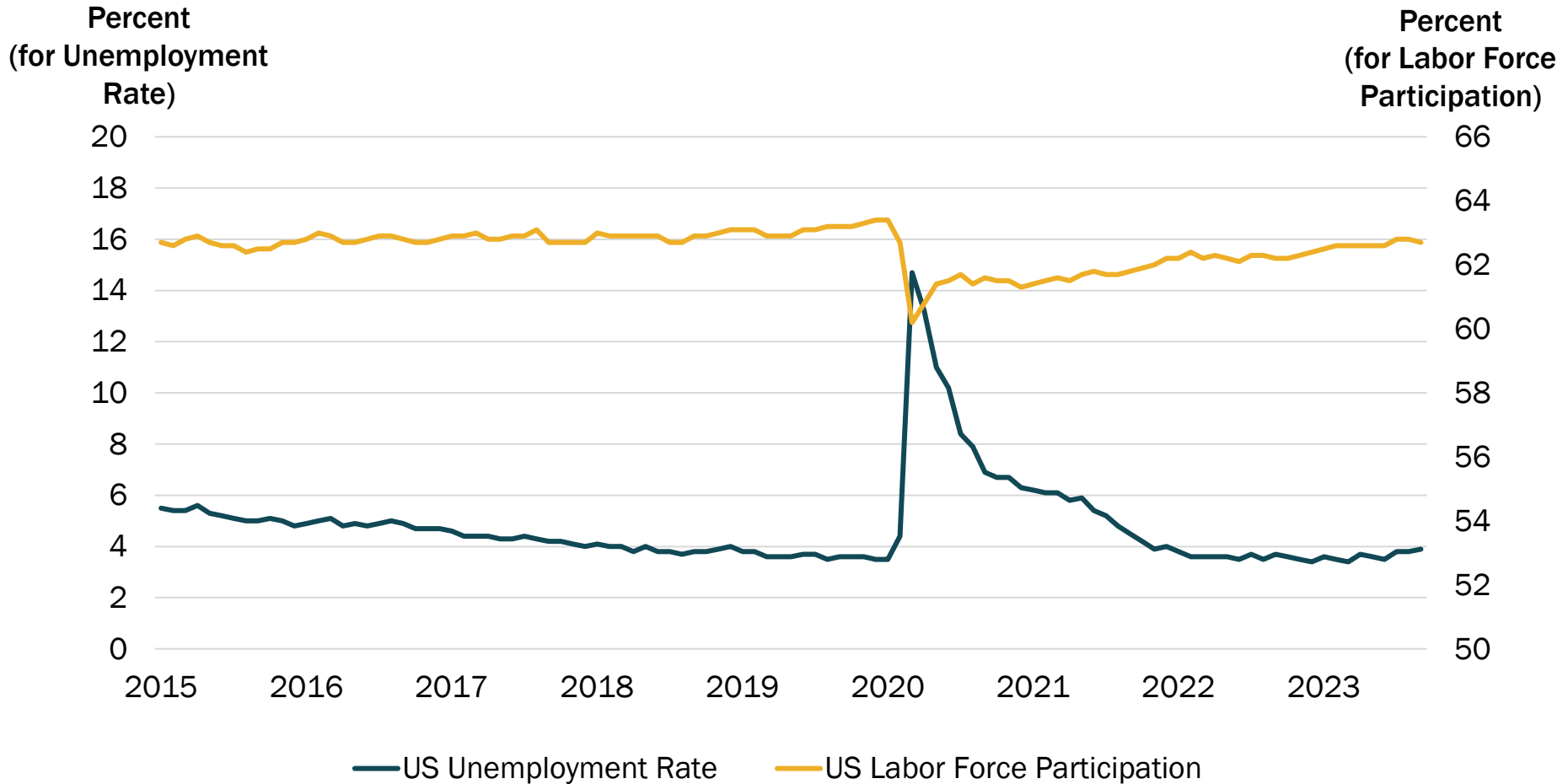
Source: U.S. Bureau Of Labor Statistics, *The Job Openings And Labor Turnover Survey*, Seasonally Adjusted, January 2015-August 2023

Tight Labor Markets Led To Higher Wages



Source: U.S. Bureau Of Labor Statistics Employment Cost Index, Selected Industries (2023)

Economic Outlook Was Severely Affected By The Pandemic

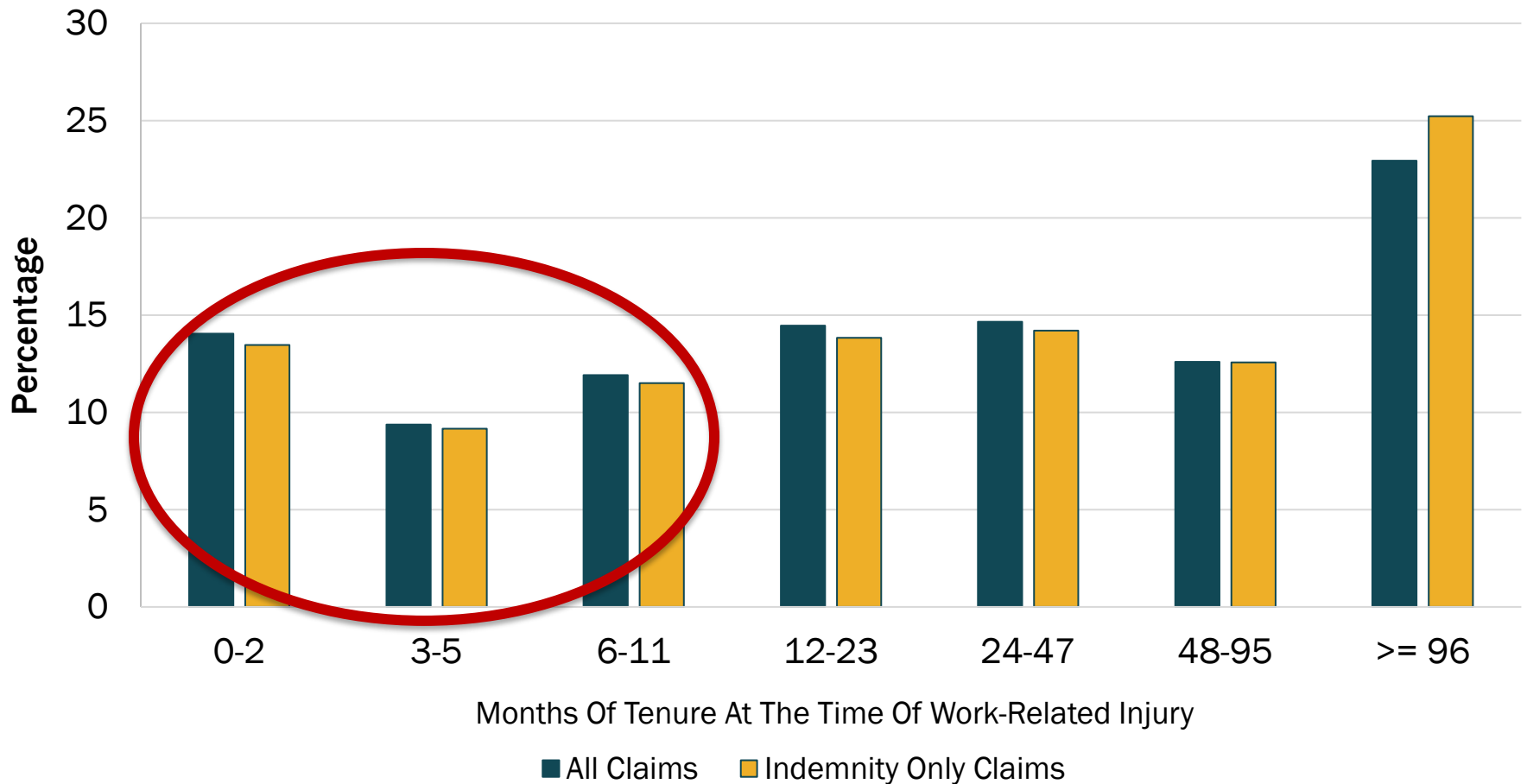


Source: U.S. Bureau of Labor Statistics

Understanding Recent Trends In Workers' Compensation

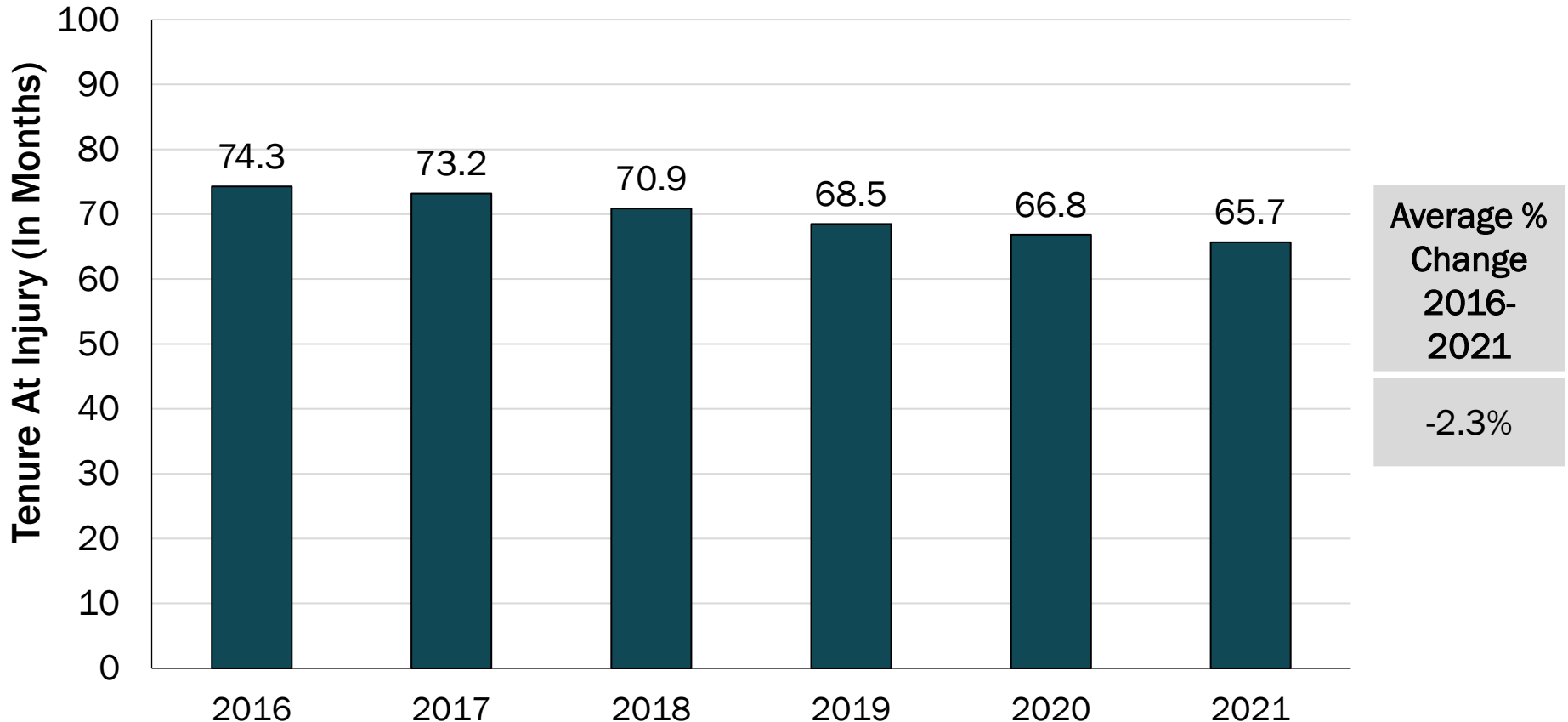
- We assessed recent trends in worker characteristics, industry, and injury mix
- Incidence of work-related injuries is increasing among workers younger than 35 and above 55
- Injuries occur earlier in the workers' tenure in manufacturing and trade
- Fractures, inflammations, and sprains & strains are occurring earlier in the workers' tenure
- Some of these trends precede COVID-19

A Third Of Injuries Occur In The First Year Of The Worker's Tenure (Half In The First Two Years)



Claims With 12 Month Maturities (2016-2021)

Injuries Have Been Occurring Slightly Faster In The Worker's Tenure



Note: Averages adjusted by worker characteristics, economic conditions, industry composition, injury mix, and state-specific characteristics (claims with more than 7 days of lost time at 12 months of maturity).

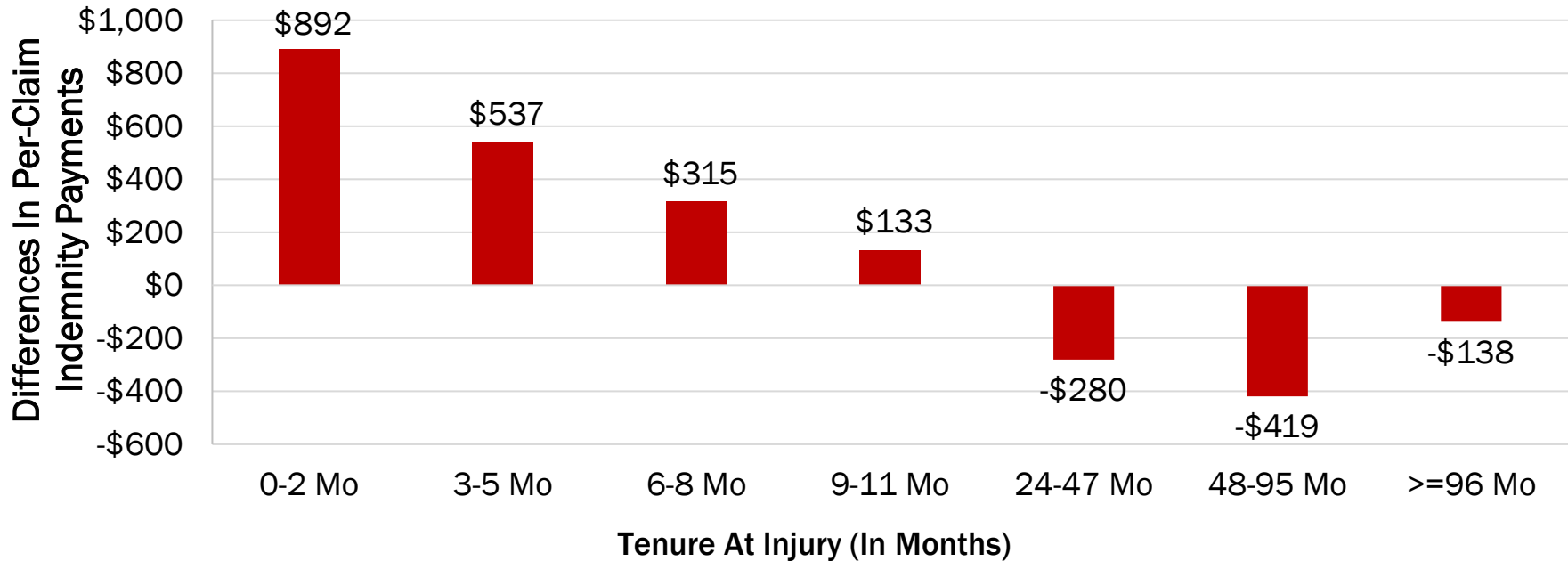
Workers' Characteristics, Economic Conditions, And Claims Outcomes

- Indemnity payments and temporary disability duration: function of worker characteristics and economic indicators
 - Tenure, age, marital status, gender, injury group, industry, weekly wage, state unemployment rate
- Statistical analyses yield estimates measuring how outcomes are explained by these variables
 - Stronger relationships may lead to more credible forecasts

Important Relationships Between Variables And Indemnity Payments

- Injuries occurring early in a worker's tenure lead to larger indemnity payments
- A weekly wage increase of \$100 increases indemnity payments by \$484
 - 5.4% of average indemnity payments
- Increase in unemployment rate by 1 percentage point increases indemnity payments by \$174
 - 1.9% of average indemnity payments

Injuries Occurring Early In A Worker's Tenure Lead To Larger Indemnity Payments



- Tenures at injury of 0-2 months: \$892 more in indemnity payments than injuries occurring 12-23 months in worker's tenure
 - 10% of average indemnity payments

Estimates obtained by adjusting for age, industry, and injury mix, relative to baseline categories: tenure of 12-23 months, age 45-54, other industries, and lacerations and contusions, respectively. Claims with more than 7 days of lost time at 12 months of maturity (2016-2021).

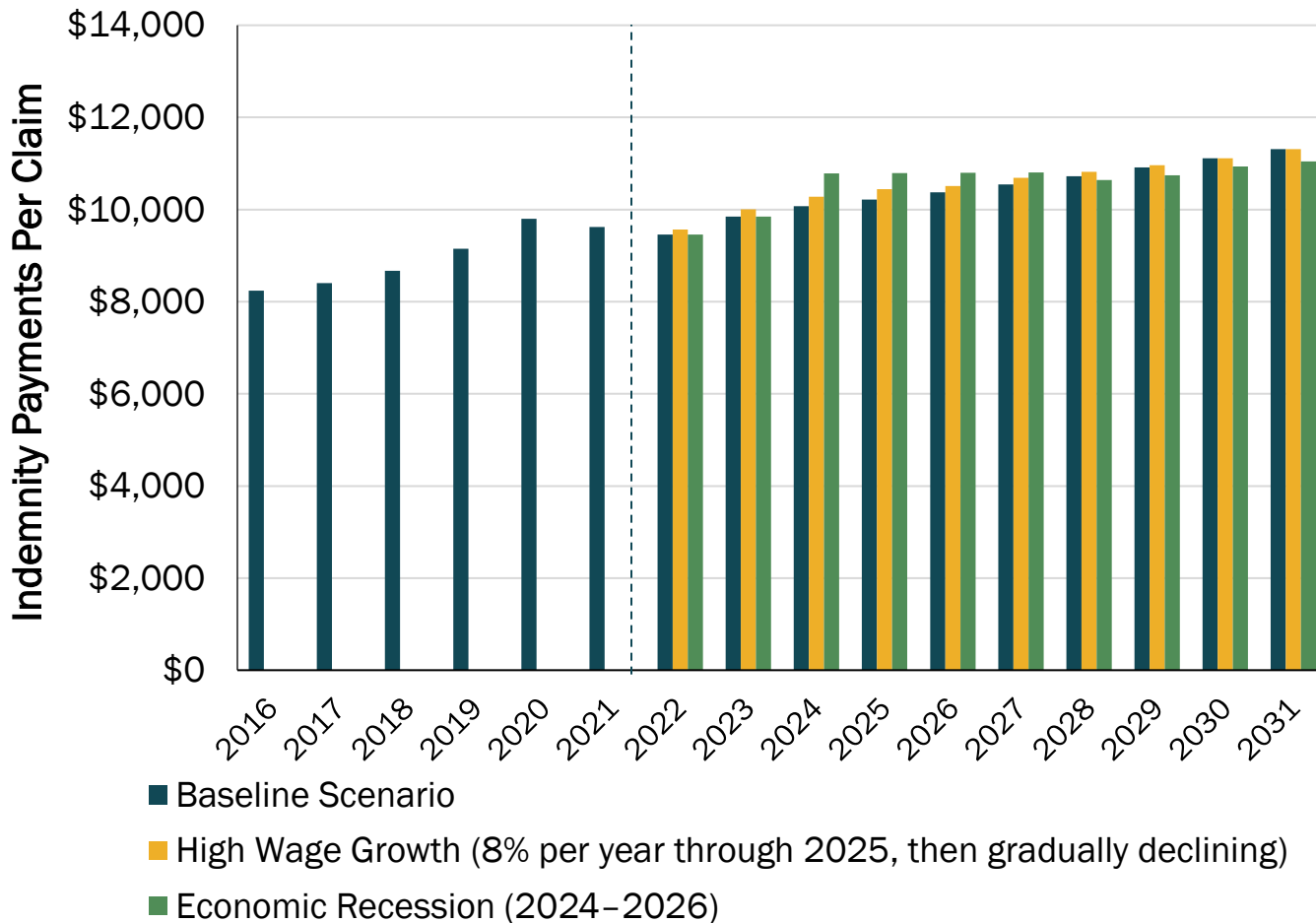
A “Baseline” Scenario

- Components of this scenario (through 2031):
 - “Baseline”—no disruptive events
 - Projected wage growth and unemployment rates
 - Congressional Budget Office estimates
 - A 1% per year faster incidence of injuries (from 2016-2021)
 - Industry and injury mix
 - BLS, and projecting past trends
 - Population aging
 - BLS estimates, and projecting past trends
 - Own statistical estimates from recent historic data on determinants of indemnity payments and temporary disability duration

Two Alternative Scenarios

- “High wage growth” scenario:
 - Annual wage growth of 8% through 2026, and a decline afterwards: 7% in 2027, 6% in 2028 etc.
- “Economic recession” scenario
 - Unemployment rate 9% in 2024, decrease to 3.5% in 2031

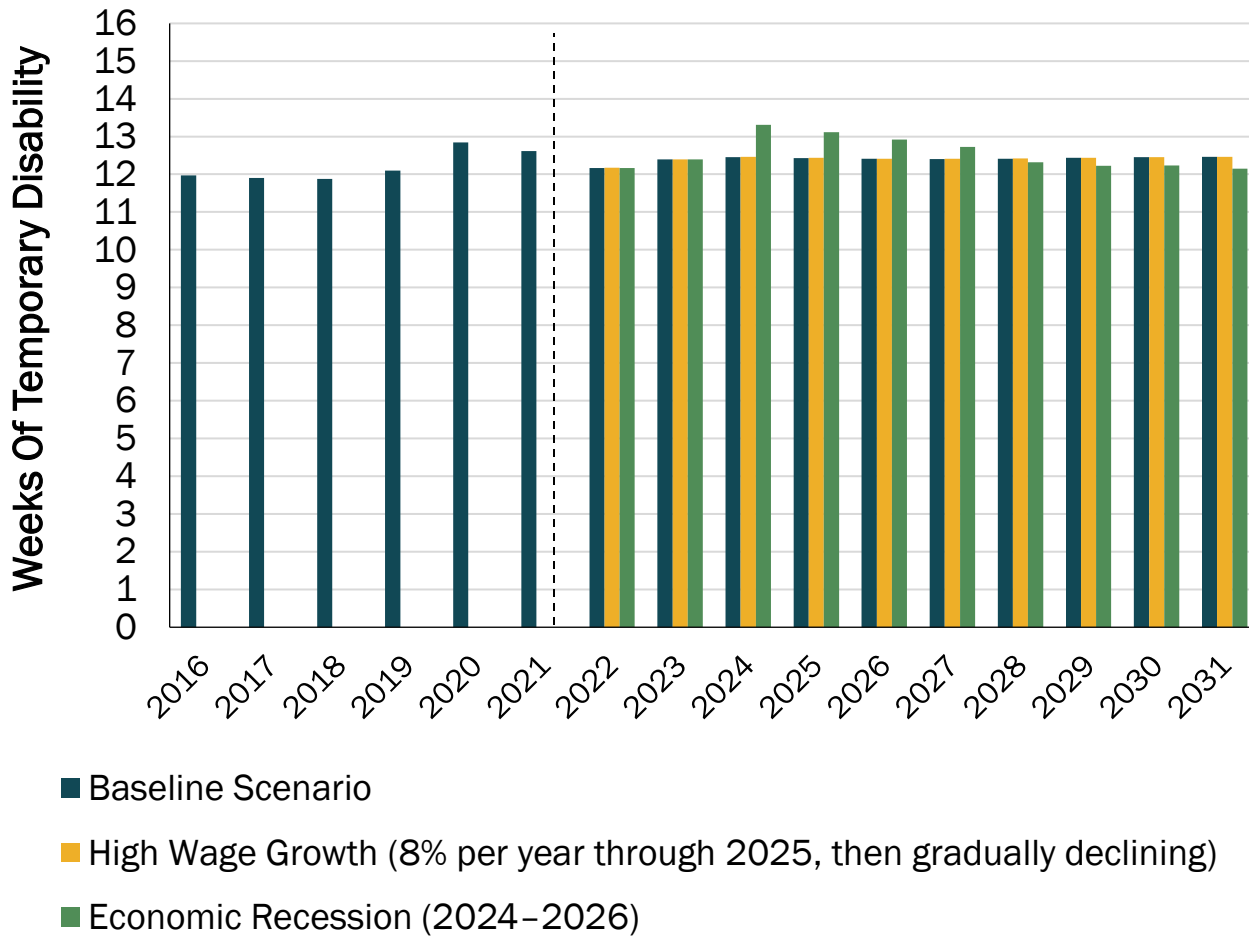
Indemnity Payments Are Expected To Increase At 2% Annually Under The Baseline Scenario



Annual Percentage Change			
Year	Base	Wage Infl.	Ec. Rec.
2023	4.1%	4.6%	4.1%
2024	2.3%	2.7%	9.5%
2025	1.4%	1.6%	0.1%
2026	1.5%	0.6%	0.1%
2027	1.6%	1.7%	0.1%
2028	1.7%	1.2%	-1.5%
2029	1.8%	1.3%	0.9%
2030	1.8%	1.4%	1.8%
2031	1.8%	1.8%	1.0%

Projections based on regression estimates from models including claims with more than 7 days of lost time at 12 months of maturity.

TD Durations Likely Remain Unchanged Under Baseline; Increases If Economic Recession



Annual Percentage Change			
Year	Base	Wage Infl.	Ec. Rec.
2023	1.8%	1.9%	1.8%
2024	0.5%	0.5%	7.4%
2025	-0.3%	-0.2%	-1.5%
2026	-0.1%	-0.2%	-1.5%
2027	0.0%	0.0%	-1.5%
2028	0.1%	0.1%	-3.2%
2029	0.2%	0.2%	-0.7%
2030	0.1%	0.1%	0.1%
2031	0.1%	0.1%	-0.7%

Projections based on regression estimates from models including claims with more than 7 days of lost time at 12 months of maturity. TD: Temporary Disability.

Other Forecasts Indicate Minimal Changes

Scenario	2025	2028	2031
Baseline scenario	\$10,217	\$10,721	\$11,309
High turnover (through 2026)	\$10,244	\$10,749	\$11,326
No population changes	\$10,205	\$10,702	\$11,282
More safety & prevention	\$10,174	\$10,655	\$11,227

- High turnover: % of tenure at injury <24 months increases by 3% per year until 2026
- No population changes: Akin to no aging of the labor force
- More safety & prevention: Fractures of lower extremities, knee derangements, and neurologic spine pain injuries decrease by 2% per year

Projections based on regression estimates from models including claims with more than 7 days of lost time at 12 months of maturity.

Discussion And Conclusions

- This study provides:
 - Insights into how recent economic disruptions affected indemnity payments and temporary disability duration
 - A prospective look into short and medium terms, accounting for economy, labor markets, industry mix, and demographic trends
- Tenure at injury: trends apparent before COVID
 - Not materially influenced by COVID
- Indemnity payments are sensitive to high wage scenarios; temporary disability duration is sensitive to economic recessions
- Age, tenure, industry, injury group are predictive of indemnity payments and temporary disability duration
 - BUT, shifts need to be very large to produce material impacts

Thank You!

- For comments/questions:
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