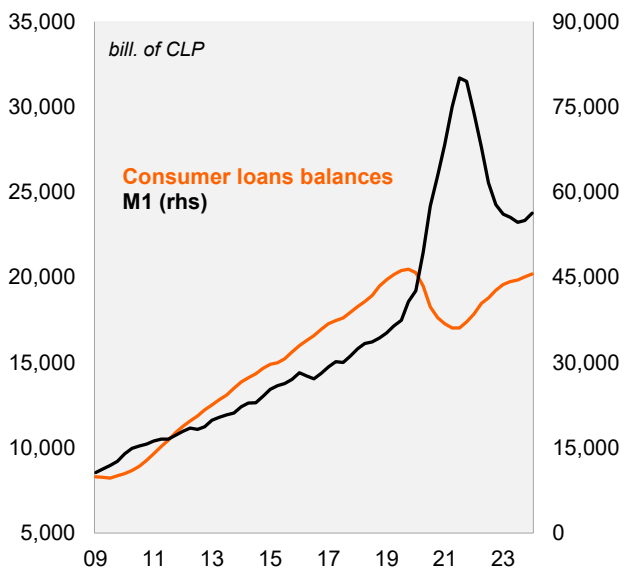


CHILE – Consumption non-performing loans: Are we over the hump?

- ▶ Consumption non-performing loans shot up from their historical lows after the pandemic, as extra liquidity from households ran out, rates rose significantly, and the economy slowed. However, after almost two years of almost uninterrupted increases, these NPLs seemed to have peaked in February when they hit 3% and have since declined at a moderate pace.
- ▶ We estimate that consumption NPLs for the main commercial banks reached their maximum in 24.Q1 at 2.7% and are likely to decrease for the remainder of the year but will remain above pre-pandemic levels at around 2.5%.

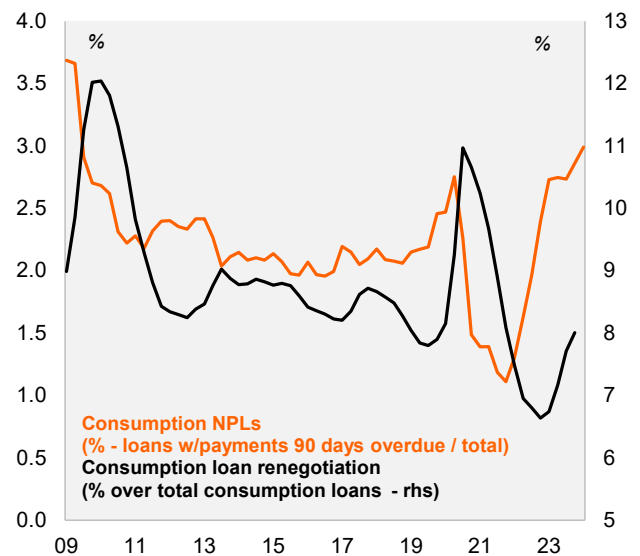
The liquidity injections that started in 2020 were unprecedented. Measures that supported households during the pandemic meant families had cash to spare for an extended period. Accompanying an explosive increase in the consumption of durable goods was an evident decline in consumer loans and a catchup in late payments. As cash balances reverted to more normal levels, loans and late payments also reverted to their previous behaviors. However, because of the slowing economy, rise in unemployment, record-level interest rates, and still elevated household consumption levels, in October 2022 delinquency rates shot past the relatively stable pre-pandemic levels, 2.1% on average between 2014 and 2019. This raised concerns because of the pressure on bank provisions.

Consumer liquidity measures



Source: Central Bank of Chile

Credit delinquencies and renegotiations



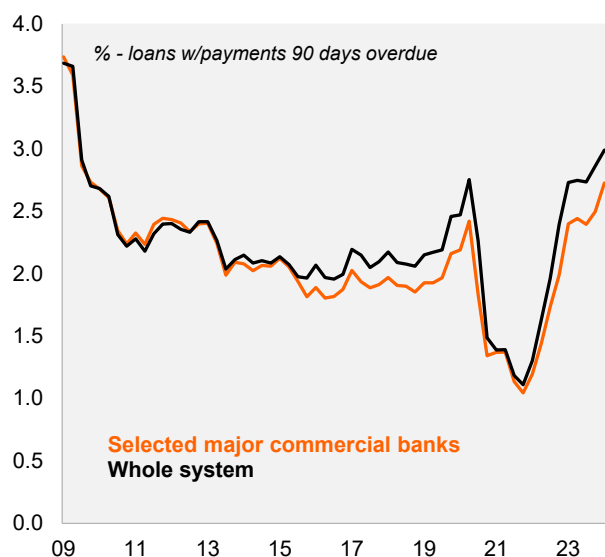
Source: Financial Market Commission

To estimate the path of consumer NPLs we use a macro-level forecasting framework. We resort to the wealth of literature on forecast combination and specify a broad set of simple specifications that make economic sense but are almost certainly incomplete because of the challenges of modelling an inherently micro-driven variable only with macro data. We use data from the Financial Market Commission that defines NPLs as consumption loans with payments 90 days overdue. We estimate the models at a quarterly frequency and year-on-year differences including

explanatory variables to reflect economic momentum, cost of loans and household liquidity. To account for the first two aspects, we selected: unemployment rate, different housing price indices, consumption loan rate, the monetary policy rate, and the consumer price index. As regards to household liquidity, the uniqueness of the pandemic period makes model identification challenging given that the implemented monetary injections are likely to have disturbed the relationships between economic fundamentals and the behavior of NPLs during those years. For this reason, we follow a two-step approach in which we first identify specifications for the 2010-2019.Q3 period using different subsets of the aforementioned explanatory variables and determine eight baseline pre-pandemic models. Then we add to every one of these the money base measure M1 and the consumption loan renegotiation measure both separately and together. In terms of updating the coefficients with the release of new data, we include three options: 1) coefficients estimated until 2019.Q3 for all variables, 2) coefficients from the baseline models estimated until 2019.Q3 and only coefficients for household liquidity variables re-estimated every period and 3) the relative weight of the baseline model as a whole estimated every period with the household liquidity variables. As a result of allowing for all this flexibility, we end up with 80 forecasting specifications. Then, to produce a point estimate we take the median of the pool of forecasts. For periods where data of the explanatory variables is unavailable, we provide forecasts obtained from our macro scenario.

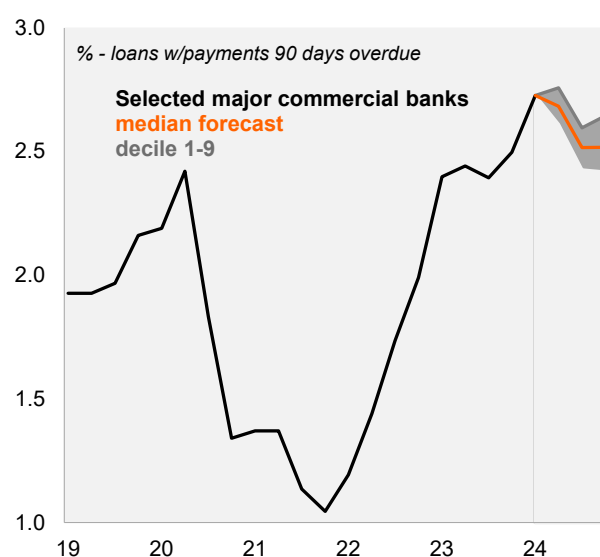
We estimate consumer NPLs are likely to have reached their peak and will start to descend over the next quarters. For our estimation we concentrate on a subset of the banking sector containing the major commercial banks that represent roughly 75% of the outstanding consumer loans¹. We restrict the estimation in this way because two major players that are left out, 20% of the market combined, seek somewhat different objectives than the rest². Based on this subset, NPLs would have reached their peak in 24.Q1 at 2.7% and would fall slightly during the year and stabilizing at around 2.5%. The uncertainty around this end-of-year point forecast is around ± 1 pp. These results are based on the assumption that the economy behaves in line with our macro scenario, so if, for example, interest rates remain higher and the economy has less momentum, we should expect the NPLs path to be above our estimation. If the opposite happens, the path should be below.

Consumption NPLs measures



Source: Financial Market Commission, Itaú

Consumption NPLs Forecast



Source: Itaú

**Marcus Cobb C.
Andrés Pérez M.**

¹ The Banks considered in our forecasts are (share of total outstanding consumer loans): Banco Chile (18,1%), Santander (19,1%), Scotiabank (14,3%), Itaú (11,5%), and BCI (10,8%).

² These are state-owned Banco Estado and commercial bank Banco Falabella. The first has in its mission to also provide banking services in areas unattractive to commercial banks. The second was born out of the Falabella retail chain and a relevant share of its consumption lending is done through the former retail chain's credit card.

Annex -Specification of models:

	Specification								Model Pool	
	1	2	3	4	5	6	7	8		
BASELINE MODELS:									Baseline Models	8
NPL (-1)	x	x	x	x	x	x	x		<i>Estimation sample 2010-19.Q3:</i>	
Unemployment rate		x		x			x		Baseline + M1, Baseline + Reneg.,	
House prices (-1)			x			x			Baseline + M1 + Reneg.	24
Apartment prices (-3)			x	x		x	x		<i>Estimation sample 2010-19.Q3:</i>	
Housing prices (-4)								x	Baseline	
New housing prices (-3)					x				<i>Updated estimation:</i>	
Consumption loan rate (-1)					x	x	x		+ M1, + Reneg., + M1 + Reneg.	24
Policy rate (-3)		x							<i>Updated estimation:</i>	
Policy rate (-4)								x	Baseline + M1, Baseline + Reneg.,	
CPI (-2)								x	Baseline + M1 + Reneg.	24
PROXIES LIQUIDITY									TOTAL	80
M1 (-2)										
Cons. loan renegotiation										

Note: All specifications include intercept. In parenthesis is the lag. Estimated with quarterly data for the period 2010-2019.Q3. All coefficients with significance of at least 95% for Baseline models.

Macro Research – Itaú

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