Equifax Inc. (NYSE:EFX) Q2 2023 Earnings Conference Call July 20, 2023 8:30 AM ET

Company Participants

Mark Begor - Chief Executive Officer

John Gamble - Chief Financial Officer

Trevor Burns - Senior Vice President, Head of Corporate Investor Relations

Conference Call Participants

Andrew Steinerman - JP Morgan

Manav Patnaik - Barclays

Kevin McVeigh - Credit Suisse

Kelsey Zhu - Autonomous Research

Kyle Peterson - Needham & Company

Andrew Jeffrey - Truist Securities

Jeff Meuler - Baird

Craig Huber - Huber Research Partners

Andrew Nicholas - William Blair

Shlomo Rosenbaum - Stifel

Heather Balsky - Bank of America

Toni Kaplan - Morgan Stanley

Ashish Sabadra - RBC Capital Markets

Seth Weber - Wells Fargo Securities

George Tong - Goldman Sachs

Operator

Greetings and welcome to the Equifax Second Quarter 2023 Earnings Conference Call. At this time all participants are in a listen-only mode. A brief question-and-answer session will follow the formal presentation. [Operator Instructions]. As a reminder, this conference is being recorded.

It is now my pleasure to introduce your host, Trevor Burns, Senior Vice President, Head of Corporate Investor Relations. Thank you, sir. Please go ahead.

Trevor Burns

Thanks and good morning. Welcome to today's conference call. I'm Trevor Burns. With me today are Mark Begor, Chief Executive Officer; and John Gamble, Chief Financial Officer.

Today's call is being recorded. An archive of the recording will be available later today in the IR Calendar section of the News & Events tab at our IR website www.investor.equifax.com.

During the call today we'll be making reference to certain materials that can also be found in the Presentation section of the News & Events tab at our IR website. These materials are labeled 2Q 2023 earnings conference call.

Also, we’ll be making certain forward-looking statements, including third quarter and full-year 2023 guidance to help you understand Equifax and its business environment. These statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially from our expectations. Certain Risk Factors that may impact our business are set forth in filings with the SEC, including our 2022 Form 10-K and subsequent filings.

We will also be referring certain non-GAAP financial measures, including adjusted EPS attributable to Equifax and adjusted EBITDA, which will be adjusted for certain items that affect the comparability of our underlying operational performance. These non-GAAP measures are detailed in reconciliation tables, which are included with our earnings release and can be found in our financial results section of the financial info tab at our IR website.

In the second quarter Equifax incurred a restructuring charge of $17.5 million or $0.10 per share. This charge is for costs principally incurred to reduce additional head counts in 2023 as we realign our business functions in advance of completing our cloud transformation. This restructuring charge is excluded from adjusted EBITDA, as well as adjusted EPS.

Now, I'd like to turn it over to Mark.

Mark Begor

Thanks, Trevor. Good morning. Turning to Slide 4, we executed well in the second quarter against a challenging mortgage and hiring markets, while delivering on our 2023 financial objectives.

We continued to outperform our underlying markets with broad-based 6% non-mortgage growth against a tough 22% comp last year. We continued strong mortgage outperformance in a challenging market and very strong new product growth with a record 14% vitality index. We also executed well against the $200 million cloud and broad-based spending reduction program we announced in February and delivered 350 basis points of sequential margin expansion in the quarter.

Globally, with the exception of the U.S. mortgage and hiring markets, we continue to see good customer demand across our consumer – good customer demand across our consumer, commercial and government lines of business. However, the U.S. mortgage market weakened relative to our expectations as we moved through the latter portions of the second quarter when mortgage rates moved above 7%, which will impact our results in the second half.

In the quarter, we delivered adjusted EPS of $1.71 per share and adjusted EBITDA margins of 32.7%, both above the guidance we provided in April. Execution against our cloud and broader spending reduction programs was also very strong and drove the 350 basis points of margin expansion in the quarter. Revenue at $1.318 billion was close to the midpoint of guidance with USIS and International delivering strong quarters, both above our expectations.

EWS non-mortgage revenue at up 4% was below our expectations, but off a very strong 52% comp last year, principally due to the weaker hiring market that impacted our talent solutions and onboarding businesses. EWS had outstanding operational execution in the quarter, delivering a new product vitality index of 25% and expanded current twin records by 12% to 161 million records, a growth of 5 million records sequentially.

EWS also had strong cost management as they fully operational their new cloud capabilities, delivering adjusted EBITDA margins of 51.5%, up over 100 basis points sequentially and stronger than our expectations. USIS had an outstanding quarter and delivered almost 6% revenue growth, much stronger than our expectations. Total non-mortgage revenue grew 8%, led by 9% growth in our B2B online and 10% growth in consumer solutions and adjusted EBITDA margins of 36% were also stronger than our expectations, expanding over 300 basis points sequentially.

Total U.S. mortgage revenue from both USIS and EWS was down about 13% or 24 points better than the 37% market decline from pricing actions, new products, records and penetration. We continue to see stronger than expected consumer shopping behavior in these higher interest rate environments. So the weaker mortgage market we saw in June had a much smaller impact on USIS than in EWS, where their mortgage activity is more aligned with closed loans.

International delivered 7% growth in constant currency, also stronger than our expectations with double digit growth in Latin America and high single digit growth in Canada and the UK CRA. International delivered 24.2% adjusted EBITDA margins of 70 bips sequentially and stronger than our expectations.

New product innovation leveraging our differentiated data assets and new capabilities delivered by the Equifax cloud is also executing at a very high level. Our new product vitality index of over 14% in the quarter was a record for Equifax and 400 basis points above our 10% long-term vitality goal and up over 100 basis points sequentially. This is encouraging for the future and reinforces our long-term strategy of leveraging our differentiated data assets, our new cloud capabilities to deliver new solutions for our customers.

We continue to make good progress on completing our cloud transformation. At the end of the quarter, over 70% of North American revenue was being delivered from the new Equifax cloud. We're convinced that our Equifax Cloud, Single Data Fabric and AI Capabilities will provide a competitive advantage to Equifax for years to come.

As we look to the second half, we expect the weaker than expected U.S. mortgage market that we saw in the latter half of the quarter to continue through the remainder of the year. Our updated guidance is for U.S. mortgage originations to be down about 37% for the year and about 20% in the second half, a reduction of five points from our prior full-year framework. We expect EFX mortgage origination outperformance to continue to be very strong in 2023.

We're also expecting to see weaker U.S. hiring market continue through for the remainder of the year, impacting Workforce Solutions talent and onboarding businesses. However, we expect to offset the hiring weakness principally from strength in the Workforce Solutions government business and continued solid performances at USIS and international.

EFX non-mortgage revenue growth was up 6%, up a very strong 22% comp last year. We expect non-mortgage revenue growth to strengthen in the second half to up 11% and up over 300 basis points sequentially relative to the first half from continued commercial execution and strong new product rollouts.

Our 2023 cloud and broader cost reduction program executed well in the quarter. As we continue to operate more of Equifax in the new cloud environment, we're seeing more opportunities for efficiencies and expect an additional $10 million of spending reductions in the second half. These new actions will deliver additional run rate savings of $25 million next year. So we now expect to deliver spending reductions of $210 million this year and over $275 million in 2024. And as a reminder, the 2023 savings are weighted to the second half and will deliver $65 million of 2024 run rate benefit.

We expect the weaker mortgage originations to impact our mortgage revenue by about $40 million in the second half. Despite the weakening in U.S. hiring, we expect to deliver 2023 non-mortgage revenue growth of about 8% from strong growth in EWS government, USIS non-mortgage and international and stronger NPI growth.

This above 8% non-mortgage growth is against a strong 20% non-mortgage growth last year, and well within our 8% to 12% long-term growth framework. The net impact of the weaker than expected mortgage market of about $40 million, partially offset by positive FX, is a reduction of our 2023 revenue guidance at the midpoint by $25 million to about $5.3 billion.

The impact of the lower mortgage revenue results in a reduction of our full year 2023 adjusted EPS guidance at the midpoint of $0.22 to $6.98 per share. We remain focused on delivering EBITDA margins of 36% and over $2 in adjusted EPS per share in the fourth quarter, which we believe sets us up well for 2024 and beyond.

In June we received shareholder approval for the acquisition of Boa Vista Serviços, the second largest credit bureau in Brazil. We're energized to complete this strategic and financially attractive acquisition. We expect the transaction to close in early August and are actively planning for integration and the transfer of our cloud capabilities, global platforms and products to help accelerate BVS growth.

The BVS acquisition will add approximately $160 million of year one run rate revenue in the fast-growing Brazilian market, and we expect the transaction to be slightly accretive to year one adjusted EPS. The guidance we provided for 2023 does not include BVS. We intend to provide more details on our expectations for BVS in 2023 at our October earnings call after we close the deal.

Before I cover results in more detail, I wanted to provide a brief overview of what we're seeing in the U.S. economy and the U.S. consumer. Since our April update, outside the challenging mortgage and hiring markets I already discussed, the U.S. consumer and our customers remain broadly resilient.

We continue to navigate a higher interest rate environment that's negatively impacting the U.S. mortgage market. Mortgage interest rates have trended upward since April and were slightly above 7% at the beginning of July and were just under 7% at the end of last week, which is clearly impacting originations. We expect mortgage originations, as I mentioned earlier, to further weaken in the second half with originations down about 37% in 2023 or 500 basis points weaker than our April framework.

Broadly, consumers are still strong and working with unemployment at historically low levels, and the market is resilient with roughly 10 million open jobs against 5 million people who are looking for jobs. Inflation is starting to abate at 3% in July, which should mean we are approaching a peak in Fed interest rates. Consumers are spending and borrowing with average credit card and personal loan balances back above pre-pandemic levels.

With consumers working and still leveraging pre-cloud stimulus and savings, delinquencies are still at historic low levels, and close to 2019 pre-pandemic levels. Subprime DQs are the only areas of stress that we're seeing.

We're also seeing credit card and personal loan utilization increases with some delinquency increases in subprime, but more broadly delinquencies are back at pre-pandemic levels, which as we all know were very low, although they remain significantly below levels we saw in the last economic event in 2009 and 2010.

Auto delinquency rates for subprime consumers are above pre-pandemic levels, as well as above levels we saw in ‘08 and – I'm sorry, ‘09 and ‘10. We believe there's been some credit tightening by our financial customers, but principally in FinTech and subprime. And looking forward, consumers holding student loans will need to resume making payments to begin in October, and we believe removing student loan payment fees will have a modest increase – a decrease on average credit scores.

Beyond the weaker motors market and slowing white-collar hiring market, which had a larger impact on EWS than we anticipated in the quarter. The combination of white-collar job reductions and broad hiring freezes has reduced both background screening and onboarding activity, and as I mentioned earlier, we expect this to continue in the second half.

Turning to Slide 5, Workforce Solutions revenue was down 4% in the quarter. Mortgage revenue was down 20%, but up about 3 percentage points sequentially. The decline of 20% compares to a mortgage origination down 37% as estimated by MBA based on data through May. As I mentioned, overall market performance in the latter part of the quarter weakened relative to our expectations, resulting in lower mortgage revenue than we expected in our April framework.

Strong record growth, the positive impact of 2023 price actions, and strong NPI performance driven by the adoption of our Mortgage 36 Solution, which is a 36-month trended mortgage product, drove to 17 points of mortgage outperformance by EWS in the quarter. And during the quarter, about 50% of twin mortgage inquiries were for products that include EWS trended or historical information, and of course, these are all at higher price points.

In the quarter, Workforce Solutions saw declines in low margin, manual mortgage verification services revenue, as some customers move some of these activities back in-house. And this negatively impacted mortgage outperformance by about 300 basis points in the quarter.

EWS had another very strong quarter of record additions with an incremental 5 million records added to the twin database, ending the quarter with 161 million current records, which was up 12%, with 120 million unique records or SSNs, which was up almost 10%.

Over the past five years, EWS has doubled the size of the twin database, a strong testament to the record acquisition strategy EWS has executed across the multiple segments of direct employers, third party payroll providers, HR software management companies, pension administrators, and self-employed individuals.

As a reminder, twin’s 120 million unique records represent individuals or SSNs on the twin database, and their 161 million current records represent current active jobs on the database, which means there's close to 40 million individuals in our data set that have more than one job, including self-employed or 1099 employees and people on defined benefit pension plans, we now covered just over 50% of the 220 million working and income producing individuals in the United States. And through our cloud tech transformation, we're expanding our capabilities to ingest all levels of records, including 1099 based self-employment records.

And as a reminder, about 50% of our records are contributed directly by individual employers, as they are customers of our expanding employer services business, and the remaining are contributed through partnerships, principally with payroll companies. During the quarter we signed agreements with four new payroll processors that will deliver records during the rest of the year.

The twin database now has 631 million total current and historical records, from over 2.8 million employers in the United States. Increasingly, more of our new products are incorporating current and historical records, with about 50% of second quarter verification services revenue, coming from products that included historical records.

Turning the Slide 6, Workforce Solutions delivered non-mortgage revenue growth about 4%, with non-mortgage revenue, now representing over 70% of Workforce Solutions revenue. And as a reminder, EWS non-mortgage revenue was up a very strong 52% in second quarter last year, which was a very tough comp.

Verification Services non-mortgage revenue which now represents about two thirds of verified revenue delivered 4% growth both sequentially and versus last year in the quarter, which was below our expectations. This was also against a very challenging 90% non-mortgage growth comp by Workforce Solutions last year.

The miss versus expectations was predominantly in-town solutions from weaker white color hiring. Government performed exceptionally well, consistent with the high growth that we had expected and consumer finance declined somewhat in the quarter.

In government we saw continued very strong growth with revenue up 21% off over a 100% growth last year in second quarter. And revenue also up almost 10% sequentially driven by strong growth was CMS at the state level, new products in twin record growth. Government now represents about 45% of verifier non-mortgage revenue.

We expect to see accelerating sequential growth in our government vertical in the second half, driven by growth from CMS Medicaid re-determinations, ACA open enrollment volume, further state penetration and pricing from state contract renewals. We began to see incremental volumes from CMS re-determinations in May and expect to see this accelerate in the second half. This strong sequential growth will also result in accelerated second half EWS growth rates.

Talent Solutions were down 6% in the quarter, but up about 1% sequentially, as we are comping off a very strong 130% growth last year from record levels of hiring in the second quarter. Also as a reminder, we are currently more heavily penetrated to white collar workers including technology, professional services, health care and financial services, which has seen greater reductions in hiring activity and broader hiring freezes than the about 7% decline that BLS is reporting through May.

Approaching 70% of Talent Solutions revenue in the quarter was from industries that had negative hiring growth versus last year, with many of those industries having significant double-digit negative growth in the quarter.

We are out growing the declining market from penetration of our digital solutions with background screeners, strong new product growth, continued expansion of twin records in favorable pricing. We are also seeing continued customer penetration of our new differentiated educational products. We expect these new products to continue to drive above underlying market talent revenue growth through 2023 and in a 2024 beyond.

The consumer lending vertical and Workforce Solutions which includes P-Loan, card, auto and debt management was about flat sequentially, but down 11% versus last year to lower auto volumes with financial services and P-Loan declines with FinTech lenders, both principally in the subprime space. We expect modest consumer lending sequential growth in the second half driven by record growth penetration in pricing. This will result in revenue growth in the second half as we lap 2022 headwinds in the auto and P-Loan verticals.

In total, we expect to see accelerated sequential growth in verifier non-mortgage in the second half, driven by strong government growth, as well as moderate sequential growth in talent and consumer lending.

Employer Services revenue of $109 million was up 4% driven by growth in our I-9 and onboarding businesses despite the negative impact of U.S. hiring. In total, our UC and ERC businesses were up slightly. Despite the slowdown in U.S. hiring, we have not seen an increase in UC revenue yet.

As a reminder, first quarter employer service revenues were seasonally higher than other quarters due to the higher Affordable Care Act in W-2 volumes. In the third and fourth quarters we expect to see overall growth in Employer Services sequentially from the second quarter levels driven by penetration and I-9 onboarding.

Workflow Solutions adjusted EBITDA margins of 51.5% were up 110 bips from first quarter and in line with our April guidance from strong operational execution. The EWS team continued to perform well despite the macro headwinds from mortgage in U.S. hiring, outpeforming the underlying markets from strong record growth, new products, penetration and price.

As shown on Slide 7, USIS revenue of $445 million was up 6% and much better than our expectations due to stronger mortgage and non-mortgage performance. USIS mortgage revenue was down less than 1% and outperformed the mortgage market credit inquiries that were down 33% by more than 30 points.

The strong pricing environment that we discussed in April, both from the addition of Telecom & Utilities attributes to our new mortgage credit solution and the increased pricing for credit scores drove the very strong out performance. At $113 million mortgage revenue was 25% of total USIS revenue in the quarter.

Mortgage credit increase again outperformed MBA's current estimate of originations by about five points from increased shopping behavior. We expect this increase shopping behavior to continue as we move through the remainder of the year.

Total non-mortgage revenue of $332 million was up 8% in the quarter, with organic growth of about 4% and better than our expectations. B2B non-mortgage revenue of $278 million which represented over 60% of total USIS revenue was up 7% with organic revenue growth of 3%.

B2B non-mortgage online revenue growth was up 9% total and 3% organically. During the quarter online revenue had strong double digit growth in commercial and identity and fraud with auto approaching 10% growth and telco and insurance growing low single digits. Banking was up slightly consistent with first quarter, with market volumes at larger financial institutions offsetting declines with smaller financial institutions and FinTechs that were more principally focused on subprime.

Financial Marketing Services or B2B offline business had revenue of $56 million that was up 1%. Strong revenue growth in fraud and header, as well as risk and account reviews was partially offset by declines in marketing, principally pre-screen marketing with IXI wealth revenue growth about flat. Pre-screen marketing revenue was at similar levels at first quarter as we continue to see significant weakness from smaller FIs and FinTech in the subprime space, which was partially offset by growth from larger FIs.

USIS is using the power of their ignite platform along with their proprietary data to ensure customers – to enable customers to drive deeper marketing insights and identifying extending offers to better prospects and delivering better marketing performance management. USIS has seen incremental penetration of growing pipeline from our advanced ignite capabilities. We did see limited growth in our portfolio review business, but have not seen a meaningful increase in our risk-based portfolio reviews that typically pick up during challenging economic times.

USIS consumer solutions direct-to-consumer business had another strong quarter with revenue up $54 million, up 10% from very good performances in both our consumer direct and indirect channels. USIS is winning in the marketplace with strong momentum from new solutions and differentiated data and key verticals of identity and fraud, commercial and auto.

We're also in active dialogues with USIS customers about the competitive benefits of the Equifax Cloud that will deliver always unsubility, faster data speeds and Equifax Cloud enabled new products driving us, which is driving a strong active new deal pipeline, which was up from the first quarter. Todd and the USIS team are on offense as they complete their cloud transformation and pivot to leveraging their new cloud capabilities to deliver new products.

USIS adjusted EBITDA margins were 36% in the quarter, up 340 basis points sequentially and the strongest USUS margins since the beginning of the mortgage market decline a year ago. EBITDA margins were up sequentially from better than expected revenue performance and good execution against their cloud and broader cost reduction program.

Turning the Slide 8, international revenue was $290 million, up 7% in constant currency and better than our expectations. Europe local currency revenue was down 2% through the expected about 16% decline in our U.K. debt management business. As we discussed previously, our U.K. debt management business was very strong in the first half last year, as the U.K. government made large catch up debt placements following COVID debt collection moratoriums.

As a result, we expect to see declines in the first half versus last year. We expected to see those declines. However, we do not expect – we do expect to see consistent sequential debt management growth as we move through the second half and we expect debt management to return to revenue growth later this year.

Our U.K. and Spain CRA business revenue was up 7% in the quarter in a very good performance. This strong performance was driven principally by strong growth within identity and fraud decisioning consumer and direct-to-consumer.

Asia Pacific delivered solid local currency revenue growth at 4%, with growth in commercial identity and fraud and D2C, as well as continued very strong growth in our India business which was up 38% in the quarter.

Latin America local currency revenue was up a very strong 23%, driven by double digit growth in Argentina, Uruguay, Paraguay and Central America from new product introductions and pricing actions. This is the ninth consecutive quarter of strong double digit growth for Latin America which we expect to continue in the second half.

Canada local currency revenue was up 8% with broad base growth in consumer and identity and fraud decisioning and commercial. In Canada we recently completed a full migration to our new cloud base fraud IQ exchange and now have all of our Canadian fraud exchange customers on this new cloud based solution.

International adjusted EBITDA margins of 24.2% were up 70 basis points sequentially and better than our expectations. The improvement was driven by good execution against their 2023 cost reduction plans.

Turning now to Slide 9 and the second quarter overall non-mortgage, constant dollar revenue growth of 6% was lower than our expectations, but against a very strong 22% growth last year. USIS and international, both delivered stronger non-mortgage growth than we expected. This was offset by the slower growth in EWS non-mortgage that I mentioned earlier in Talent and non-boarding, despite their very strong growth in their government business.

As we looked at the second half, we expect non-mortgage revenue growth to grow sequentially in the third and fourth quarter, led by very strong growth in the EWS government business, and growth in EWS talent and consumer lending from new products. We also expect continued strong performance in USIS and international, resulting in third quarter Equifax non-mortgage revenue growth above 9%, which is well within our 8% to 12% long term growth framework.

Turning to Slide 10, new product introductions leveraging our differentiated data and the Equifax Cloud are central to our EFX 2025 growth strategy. In the second quarter we launched over 30 new products and delivered a record 14% Vitality Index. Our second quarter VI was again led by strong performances in EWS and Latin America. In the second quarter over 80% of our new product revenue came from non-mortgage products leveraging the Equifax Cloud.

Leveraging our Equifax Cloud capabilities to drive new product roll-outs, we expect to deliver Vitality Index of approximately 13% in 2023, which is 300 basis points above our 10% long term Vitality Goal Index. This equates to about $700 million of revenue in 2023 from new products introduced in the past three years. New products leveraging our differentiated data, Equifax Cloud capabilities and Single Data Fabric are central to our long term growth framework in driving Equifax top line and margins.

On the right side of the slide we highlighted several new products introduced in the quarter. These new solutions are a testament to the power of the Equifax Cloud and driving innovation that can increase the visibility of consumers to help expand access to credit and create new mainstream financial opportunities.

We launched a new product this quarter, Talent Report Flex 2.0, a customizable pre-higher employment verification solution, that helps solve the challenge background screeners and HR professionals may experience when seeking to verify a candidate specific employment records. With a unique and first-to-market employer preview option, a list of employer names is now available on the work number using a candidate's SSM. This allows the customization of the employment history report by selecting only the records wanted. With the power of the Equifax Cloud, we'll bring new solutions to market to meet the needs of our customers.

Turning the Slide 10, we were very excited to receive shareholder approval for our new Boa Vista acquisition in late June. BVS is the second largest credit bureau in the fast growing Brazilian market with over a $2 billion TAM. We expect the transaction to close and early August and Equifax will be able to provide Boa Vista with access to expansive Equifax international capabilities, our cloud native data, products decisioning and analytic technology for the rapid development of new products and services and expansion into new verticals like identity and fraud in Brazil.

As a reminder, I mentioned earlier, we expect Boa Vista to deliver approximately $160 million in run rate revenue to Equifax and to be accretive to adjusted EPS in the first year. As I mentioned earlier, Boa Vista results are not included in the guidance we're providing today. We'll provide more detail on Boa Vista’s impact in 2023 during our October earnings call after the transaction is closed.

Given the size of the transaction, we plan to pause on M&A activity in the second half to focus on integration of BVS and our ‘21 and ‘22 acquisitions. And our intention is to use excess free cash flow over the coming quarters to pay down debt and reduce our leverage.

Turning this Slide 12, we believe that artificial intelligence is fundamentally changing Equifax business capabilities and is becoming table-sticks for data analytics companies to manage increasingly large diverse and complex data sets, within a highly regulated data bringing unique complex challenges around AI explainability.

On the left side of Side 12, our large and diverse proprietary data base – data set is a big differentiator for Equifax including our income and employment data, traditional alternative credit data, cell phone, utility and Pay TV data, identity and fraud data in our commercial and wealth data.

This proprietary data at scale, heat and length in our new Single Data Fabric gives us significant advantages in using AI to build advanced models, scores and products including identity and fraud solutions, enabled by our best in class Equifax Cloud native technology. To date, Equifax has about 70 approved AI patents supporting our AI NeuroDecision Technology which we call NDT, and Explainable AI which is critical to ensuring that the correct data is used to make credit decisions that surface by AI models and scores.

Equifax will continue to invest in AI as we may remain on offense, leveraging Google's Vertex AI capabilities, combined with our own Equifax NDT capabilities will be building more predictive and valuable models and scores with our expanding data set, and accelerating the speed at which we develop new model scores and products to bring more current solutions to our customers. We believe Equifax is uniquely positioned to capture the value of AI going forward.

Now I'd like to turn it over to John to provide more detail on our third quarter and full year guidance. We're executing very well against our strategic priorities and delivering revenue growth and expanding margins in a challenging macro environment.

John Gamble

Thanks Mark. As Mark mentioned, second quarter mortgage market originations were estimated by MBA with data through May at down about 37%, which is in line with our expectations for the quarter.

As shown on Slide 13, second quarter credit increase were down 33% and also in line with our April expectations. However, as Mark mentioned, we saw weaker than expected inquiry data in June, which impacted our overall mortgage revenue for the quarter. As we look to the second half of 2023, our planning does not assume a fundamental improvement in the mortgage or housing markets from the levels we saw in late June and early July. We're applying normal seasonal patterns to these current run rates of credit and twin inquiries.

In the first half of 2023, credit inquiries were down about 39% year-to-year, about 8 percentage points better than the about 47% decline in mortgage originations as estimated based on MBA data. In the second quarter, this spread narrowed to about 5 percentage points. In the third and fourth quarters, we expect this elevated impact from mortgage shopping and application activity that does not result in a closed loan to continue at about 5 percentage points.

Applying normal seasonal patterns to the run rate we are seeing for mortgage credit inquiries in the end of June and early July, we expect mortgage credit inquiries to be down 31% for all of 2023, which is a slight reduction from our April guidance. However, we are expecting mortgage originations to be down about 37%, reflecting about 6 percentage points of shopping behavior that benefits credit inquiries. This is about 5 percentage points weaker than the 32% we discussed in our April guidance for mortgage originations.

This full year guidance for mortgage credit inquiries would result in second half mortgage credit inquiries being down about 14%, with the third and fourth quarter credit inquiries being down about 23% and 4% respectively. And applying the 5 percentage point benefit to credit inquiries relative to mortgage originations from shopping that is consistent with what we saw in the second quarter, we would estimate mortgage originations in the second half would be down just under 20%. We are expecting the number of originations to weaken slightly in the third quarter relative to the second quarter, and fourth quarter originations to weaken somewhat seasonally relative to the third.

As we have discussed in the past, Workforce Solutions mortgage revenue is more closely tied to mortgage originations. This reduction in 2023 expected mortgage originations relative to our April guidance reduces Workforce Solutions revenue in the second half of 2023 by about $40 million. As our expectation for USIS credit inquiries in the second half of 2023 is slightly weaker than our April guidance, USIS mortgage revenue did not change meaningfully.

Turning to Slide 14, as Mark referenced earlier, in the second quarter we exceeded our adjusted EBITDA margin and adjusted EPS guidance and delivered well against our 2023 spending reduction plan that will now deliver $210 million in spending reduction in ‘23 versus 2022 levels, including workforce reduction, closer to data centers and additional cost control measures.

For 3Q we expect adjusted EBITDA margins of about 33.5% at approximately the midpoint of our guidance range. The sequential margin expansion is driven by both revenue growth, as well as the savings related to our expanded $210 million dollar spending reduction plan Mark previously discussed.

As revenue grows sequentially through the second half of ’23 and cloud and broader cost reductions accelerate, we are focused on delivering fourth quarter adjusted EBITDA margins of about 36% and adjusted EPS exceeding $2 per share in the fourth quarter.

Slide 15 provides our guidance for 3Q‘23. In 3Q’23 we expect total Equifax revenue of between $1.32 billion and $1.34 billion, with revenue up about 6.9% at the midpoint. Non-mortgage constant currency revenue growth should strengthen to over 9% and will be partially offset by mortgage revenue that is down low single digits.

FX is expected to have a minimal impact on revenue, and acquisitions are expected to benefit revenue by about 1%. As a reminder, this guidance does not include BVS. We’ll provide more information on BVS at our October earnings call.

3Q’23 adjusted EBITDA margins are expected to increase sequentially by about 75 basis points at the midpoint of our guidance, reflecting both sequential revenue growth and the benefits of our cost actions. Overall, BU EBITDA margins in total are expected to be up sequentially for 2Q’23, driven by Workforce Solutions returning to revenue growth in the quarter, as well as margin improvement international. Corporate expenses for 3Q’23 are expected to be about flat with 2Q’23.

Business unit performance in the third quarter is expected to be as described below. Workforce Solutions revenue growth is expected to be up about 7.5%. We expect non-mortgage revenue will return to over 10% growth year-to-year from continued strong growth in government and a return to growth in Talent Solutions in consumer lending verticals. EBITDA margins are expected to be about flat sequentially.

USIS revenue is expected to be up about 7.5% year-to-year. Non-mortgage year-to-year revenue growth should be up slightly from the 8% we saw this quarter, above their long term 6% to 8% revenue growth framework. Mortgage revenue is expected to return to year-to-year growth in the quarter. Adjusted EBITDA margins are expected to be down about 100 basis points sequentially, principally due to the lower revenue.

International revenue is expected to be up 4.5% in constant currency. EBITDA margins are expected to increase a very strong 250 basis points sequentially, reflecting sequential revenue growth and strong cost management, including the benefit of planned cost reductions. We're expecting adjusted EPS in 3Q’23 to be $1.72 to $1.82 per share.

Slide 16 provides the specifics of our 2023 full year guidance. As Mark mentioned, we're lowering our full year revenue guidance by $25 million at the midpoint of $5.3 billion from the weaker mortgage market. As Mark discussed, the reduction in revenue guidance reflects our assumption that U.S. mortgage originations will decline 37% in ‘23, 5 percentage points more than our April guidance, reducing mortgage revenue by over $40 million in Workforce Solutions.

As I referenced earlier, we're seeing continued high levels of shopping, which is benefiting USIS, and as such mortgage revenue and USIS is not expected to be meaningfully impacted by the lower level of originations. Total mortgage revenue is expected to decline about 13% in 2023.

Partially offsetting the reduction of Workforce Solutions, mortgage revenue is positive FX. We continue to expect non-mortgage constant currency revenue growth to be strong at above 8% in 2023, slightly stronger than our April guidance. Non-mortgage constant currency revenue is expected to grow over 11% in the second half of ‘23 as continued solid performance from USIS and international and accelerating growth in the EWS government vertical more than offset the impact of weaker U.S. hiring.

Adjusted EBITDA margins are expected to improve consistently throughout 2023, with the third quarter at 33.5% and the fourth quarter at about 36%. As Mark mentioned, we remain focused on delivering both 36% EBITDA margins and over $2 per share in 4Q’23.

As Mark also mentioned, we're reducing our adjusted EPS guidance for 2023 to the range of $6.85 to $7.10 per share at the midpoint of $6.98. This is a reduction of $0.22 or about $35 million in operating income. This is principally driven by the loss of over $40 million of high margin Workforce Solutions mortgage revenue. We believe that our full year guidance is centered at the midpoint of both our revenue and adjusted EPS guidance ranges.

Total capital spending for 2023 is expected to be slightly over $550 million. Capital spending in the second quarter was about $150 million in line with our expectations. We expect capital spending in the third quarter to decline sequentially by almost $15 million as we continue to progress U.S. and Canadian migrations to Date Fabric. CapEx as a percentage of revenue will continue to decline in 2024 and thereafter as we progress toward reaching 7% of revenue or below.

As we discussed in April, we remain focused on delivering our midterm goal of $7 billion in revenue with 39% EBITDA margins. Market conditions are significantly different than when we first discussed in November 2021, our goal of achieving these 2025 goals. The U.S. mortgage market is expected in 2023 to be down about 40% from the normal 2015 to 19 average levels we had discussed, to deliver $7 billion in revenue in 2025.

Our non-mortgage revenue has grown faster than we discussed with you back in November 2021. However, even after considering the additional revenue from the BVS acquisition of recovery in the mortgage market from the levels we are seeing in 2023, of on the order of two-thirds of the loss volume still needed to achieve our $7 billion goal in 2025.

We are focused on driving above market growth and delivering the cost and expense improvements committed with our expanded 2023 and 2024 spending reduction plans, and as part of our data and technology cloud transformation, which are needed to achieve 39% EBITDA margins as we exceed the 7 billion revenue level. We will continue to discuss with you our progress toward our 7 billion dollar goal as the mortgage and overall markets evolve in 2023 and forward.

And I would like to turn it back over to Mark.

Mark Begor

Thanks John. Wrapping up on slide 17, Equifax delivered a solid quarter with adjusted EBITDA margins and adjusted EPS above our guidance despite the challenging mortgage and hiring markets. USIS and international delivered strong quarters offsetting some weakness in the EWS Talent and Onboarding businesses, to allow us to deliver revenue at about the midpoint and EPS above guidance. The breadth and depth of our businesses and execution against our 2023 cloud and broader spending reduction program allowed us to deliver despite a challenging macro environment.

Summarizing at the business unit level, Workforce Solutions continue to deliver against their long-term growth strategy. While their 4% revenue decline was pressured by mortgage and hiring macros, they were comping off a very strong 21% growth last year. We expect that growth to recover in the second half, and importantly EWS had another very strong quarter of twin record additions, adding formula payroll providers, which brings a total added since the beginning of last year to 17, and increased current records to $161 million, up $5 million from the third quarter and toward 12% versus last year, with total records growing to $631 million. Workforce delivered a very strong NPI vitality index of 25%, leveraging their cloud capabilities which will benefit them in the second half and in ‘24 and beyond.

In the continued growth of Twin, strong NPI and government growth positions EWS for 15% growth in the second half. And EWS operating focus delivered 51.5% EBITDA margins, which is up over 100 basis points and stronger than we expected.

Second, USIS continued their momentum for the first quarter was strong non-mortgage growth of 8% total and at the top end of their long-term framework and 4% organic, driven by online B2B non-mortgage growth of 9% total and 4% organic, as they focus on customer migrations to the Equifax Cloud. USIS delivered EBITDA margins of 36%, up over 300 basis points sequentially through revenue growth and strong cost management.

International delivered strong 7% local currency growth with strong growth in what’s Latin America, Canada, India and our European credit businesses. And they delivered EBITDA margins of 24%, up 70 basis points and stronger than our expectations.

As mentioned earlier, our second quarter Vitality Index of 14% is an Equifax record and was 400 bips above our 10% long-term growth framework, as we've delivered over 60 new products year-to-date, leveraging the new Equifax Cloud. The focus of our Equifax Cloud Data and Technology Transformation is in completing those North American migrations, which will allow us to further accelerate new product launches and complete legacy system decommissioning.

Our Cloud native technology will differentiate Equifax and allows us to be an offense with leading systems stability and capabilities that position us to leverage AI tools to drive revenue growth and cost efficiencies.

We're executing well against our 2023 cloud and broader spending reduction plan that will now deliver $210 million of savings this year, with run rate savings of $275 million in 2024. And this is up $10 million in ‘23 and $25 million in ‘24 from our April framework.

We remain focused on delivering 36% adjusted EBITDA margins and over $2 per share in adjusted EPS in the fourth quarter, which sets us up well for 2024. And we're energized about receiving shareholder approval for the BVS acquisition in June, and we're on track to close this strategic and financially attractive acquisition in early August.

And as mentioned earlier given the weaker than expected mortgage market, we're lowering our full year revenue guidance by $25 million to $5.3 billion at the midpoint, with full year 2023 adjusted EPS at the midpoint to be down $0.22 per share to $6.98 from the impact of the lower high – high – lower but high margin mortgage revenue.

We're energized to be entering the next chapter of new Equifax as we pivot from building the new Equifax Cloud to leveraging our new cloud capabilities to drive our top and bottom line. This is an exciting time for Equifax – exciting time for Equifax, and we're convinced that our new Equifax cloud-based technology, differentiated data assets, and our new Single Data Fabric and our market leading businesses will deliver higher growth expanded margins and free cash flow in the future.

And with that operator, let me open it up for questions.

Question-and-Answer Session

Operator

Thank you. [Operator Instructions] Today's first question is coming from Andrew Steinerman of JP Morgan, please go ahead.

Andrew Steinerman

Hi John! Let me just ask my two questions together. The first one is, could you just tell us what second quarter mortgage revenues is as a percentage of total revenues. I didn’t catch that if you gave it.

And the second one is looking at the EWS revenue growth guide for third quarter of 7.5% which is on slide 15, and then kind of taking it together with the comments for EWS revenue guide on slide 16. It seems to imply a rather strong revenue ramp for EWS in the fourth quarter compared to the third quarter, and could you just comment on that?

A - John Gamble

So, your first question, it is 21%, the answer your first question.

Andrew Steinerman

Thanks.

A - John Gamble

And as we take a look at EWS, Mark talked about it very – I think fairly completely right. What we're seeing is we're expecting to see nice sequential improvements. I'm talking specifically about non-mortgage as we move through third quarter and into fourth quarter. A lot of it driven by very strong growth in government, which we feel very good about and the strength we're seeing in the government business, not only in the third and fourth quarter, but we've seen in the first quarter and in the second quarter. And we're also expecting to move back to see sequential growth in Talent driven by new product, and also in our consumer lending businesses, also driven by new product and to some extent penetration.

So we think those factors allow us to see nice sequential growth as we go through the year. And as on mortgage and as we're now comparing against easier comps as we get into the second half of 2023 versus 2022, we see better growth rates.

You're also going to see obviously better growth rates in mortgage, although we took mortgage down, right, the level of decline in mortgage year-on-year and originations declined substantially going through the year, we can expect to continue to have very good mortgage out performance in EWS, so that allows us to return to growth in EWS mortgages we get toward the best of the very end of this year. So with those two factors together, we think we're going to see nice acceleration in EWS revenue as we go through the rest of this year.

Andrew Steinerman

Thank you so much.

Operator

Thank you. The next question is coming from Manav Patnaik of Barclays, please go ahead.

Manav Patnaik

Thank you. Good morning. Maybe my first question, just to follow-up on that. I guess you addressed the revenue visibility to seem to have as your ramp up into the end of the year. Can you just talk about the moving pieces on margins? Like how confident are you to hit that 36% and how that flows through to next year?

Mark Begor

I'll start Manav and John can jump in. So we’ll leave the revenue leverage aside, so we have – you know we think its good visibility outside of the mortgage piece. As you know, we increased our cost program by another $10 million this year and $25 million next year. So we see additional efficiencies as we get further into the cloud completion. So combining that with the core program we announced in February, we just have a lot of visibility, because we know when contractors are leaving and when we're taking other cost actions. So that that gives us a lot of confidence in the cost side of that across all the businesses and at the corporate level.

John Gamble

And again, as Mark said, good focus on cost, we have good visibility on cost and we do – obviously we do need to see the revenue growth we're talking about. But I think we feel very good about the sequential movements we're talking about in our non-mortgage business. We delivered well in non-mortgage other than the Talent impacts we talked about in the second quarter.

And then obviously we've made an assumption on the mortgage market. We think we've made a reasonable assumption, but having the mortgage market deliberate the levels we're talking about, obviously it’s also needed for us to deliver our 36% margins in the fourth quarter.

Manav Patnaik

Got it. And then just not work force solutions, I mean I guess most of the changes are just your volume assumptions. I missed what your new gross hiring assumption is, but I was also hoping you could address – I’ll confirm that you're not seeing any changes in the competitive behavior, like all these changes are really just your volume assumptions.

Mark Begor

John, I'll let you jump on the hiring assumption, but you know we did mention Manav that for example in mortgage, we're seeing some mortgage originators move manual verifications back from Equifax in-house, so that had an impact us on the quarter. We expect that to continue, so that it is clearly a revenue impact and what we're seeing is that you've got mortgage originators doing less activity, so they've got people sitting in their offices and they are deciding to do some of those manual verifications in-house, so that clearly had an impact.

I think there was no question that experience through, to a lesser degree, Transunion and they're kind of new focus on this or. In the marketplace we don't see that being a meaningful impact on our revenue, but they are definitely out there and they are doing more than they were a year ago. So that clearly also has an impact, particularly probably in mortgage.

A - John Gamble

In terms of Talent Market I don't think we gave a percentage. I think in April we talked about the market being down like 10%. We said June was worse and that we're expecting that weaker level of the Talent Market to continue through the rest of the year. We didn't really give a number, but weaker than the 10% we talked about in April.

A - Mark Begor

And again, we also commented Manav that we see ourselves over indexing to white collar employers in our customer base, and those are more impacted from both hiring freezes, you know as well as layoffs and blue collar side.

Manav Patnaik

Got it. Thank you.

Operator

Thank you. The next question is coming from Kevin McVeigh of Credit Suisse, please go ahead.

Kevin McVeigh

Great! Thanks so much. I’ll ask one multi-part question. So thanks for framing the $40 million run off. Was that purely higher rates or any dislocation from regional banks or maybe tightening standards and then I wondered if you could give us a sense of – the sensitivity on the way up. So the extent rates started to go down. Like, what would be that theoretical level, where you may see people get a little bit more aggressive with a heloc or refinance. I mean it seems like 7% was a trigger for some weakness. What level of rate and is there any way to maybe frame the sensitivity of what 6.5% might mean for the businesses as we think about 2024.

Mark Begor

Yes, I think there's a lot of factors Kevin in the mortgage space. Clearly higher rates – you know I think the uncertainty around rates is as much as that consumers that are thinking about purchasing a home. Rates go up towards that 7%. They pull back and wait to see what's happening. Where will rates stabilize is an activity that we're definitely seeing.

There's an element of – and you've read about this, you see it, as if the shortage of housing stock. You mean there isn't a lot of inventory out there for people to make home purchases. Those that own homes are doing – are not upgrading, you know meaning, going buying a larger home or moving in a different neighborhood in town, because of the low rate they're currently sitting on in their mortgage and some uncertainty about where rates are going. So we believe that there's some element of rate stabilization that consumers will increase their activity from that. I don't think we're thinking about rate reductions. You know that'll happen sometime in the future, whether it's a year from now or in ‘25 or ‘26 you know going forward.

But as a reminder, we've never seen purchase volume declines at this level, that from historical levels we're well below 40% of below historic levels, excluding kind of a refi boom that we had in ’20 and ‘21 and ’22. You know that just has never happened before, so it's our view that at some point we’ll return to normal historical levels, you know whether that's in a year from now, as people get more comfortable operating in a 6%, 7% mortgage interest rate environment where it’s into ’26. There’ll be return to normalization over time is our expectation. What would you add John?

John Gamble

Well, just I think the important thing for us also is we're continuing to drive very good performance above market, right. So again, very strong performance in the first quarter at 20 points. In the second quarter effectively 20 points if you adjust for the fact that we made a decision to not participate to the same level, in what's really a not particularly profitable manual business and we talked about how that reduced our out performance by about 300 basis points. So again, on the very high margin Digital Verification Business, again about 20 points out performance. So we feel good about our continued outperformance.

We also feel good about the fact that to the extent we see a faster growing mortgage market than what we forecast that will participate very clearly and we'll see the upside from that. But, we clearly saw the reduction in transaction volume when rates moved up to above seven. It's hard to predict what's going to happen when they move back below, but to the extent that we see nice growth, from that to the extent it occurs, we think will participate well.

Mark Begor

Then at some point on the other side it is high inflationary environment where the feds had to raise interest rates. There'll be a time – I'm not an economist, but at some point in the future, the feds going to reduce interest rates to boost economic activity.

It's just the cycle that we typically have and there'll be another refi window whether that's in ’25, ’26, ‘27 but we'll be well positioned for that, and it’s been a very high incremental margins on mortgage revenue declines or mortgage revenue growth. We’ll see the other side of that at some point in the future at Equifax.

Kevin McVeigh

Thanks so much.

Operator

Thank you. The next question is coming from Kelsey Zhu of Autonomous Research. Please go ahead.

Kelsey Zhu

Good morning. Thanks for taking my question. My first one is on the government vertical for EWS. So part of the acceleration of growth in the second half is coming from the government vertical which part of that is coming from the Medicaid re-determination process. I was wondering if you can talk about how much of that was done in Q2 and kind of how much do you expect to be done in Q3 and Q4. And in general, it will be helpful to understand a little better about the government revenue breakdown across different programs for Medicaid, Social Security that’s down. Thanks.

Mark Begor

Yes, there's a bunch of factors driving government which is the good news for us. You know it's a very important, fast growing segment of Workforce Solutions. It's one where we have a very, very strong market position given the scale of our data set to 630 million you know historical records and our active records.

You point out one of the levers you know on the re-determination, we saw some of that activity pick up in May and June and we expect that to continue in third quarter and fourth quarter and much of that to be a 2023 event which is positive.

We're also seeing more ACA volume. We're getting more penetration at the state level. Remember this business, which is approaching $500 million is in a TAM that's close to $3 billion and each state and each agency at the state level are separate organizations and we have a commercial team that's headquartered at many of the state capitals that's working to bring our solutions to convert current manual activity around verifications for whether it's unemployment claims or childcare support, food support, all the other social services to convert them from manual to using our automated solution. So that's a big lever for growth is we add more states and more agencies, so that we have a pipeline. We have visibility around those relationships.

Another lever is we're constantly renegotiating those individual contracts that we have. And again remember, 50 states. Think about maybe six or eight agencies in each state that we have relationships with a portion of them. The ones that we have, those contracts come up and we worked – increase price for the additional value that we're delivering. And then the other lever we have is at the federal level. We have federal programs with some of the big organizations. You mentioned one security administration, those are also growth programs for us at the government level.

Kelsey Zhu

Got it. My second question is on the talent vertical. I was wondering, could you share a little bit more about revenue breakdown kind of cross blue collar higher activity versus white collar. And I know you've introduced this new pre-employment verification services kind of targeting the hourly workforce, nothing that will help drive penetration with the blue collar higher activity. So I was wondering if you can talk about, how much penetration you've gained with that product and kind of the growth outlook for blue color revenue versus white collar.

Mark Begor

Yes, so we participate in all employees. We're making the point that we with our current customer base, again customers being background screeners. The customers that we have tend to over index to white collar jobs, which is why we're seeing more of an impact right now. But we have a lot of blue collar jobs coming through and employment verification work that we do.

The new solution on hourly has only been in the marketplace for 30 days, so it's very new but we've seen very positive traction. We think it's not only going to drive penetration, with our existing customers, but it's also going to allow them to drive growth and their business. Meaning they can go out and pick up more volume or share in those kind of employees doing verification work.

We also talked about some of the other solutions we have outside of just employment history. We've seen very positive growth in our education solution, where we have an instant solution around verifying education backgrounds which is used in a lot of white collar job. That's a newer solution for us that we've been in the marketplace for call it a year, but we're growing a lot of usage and share with that, so that's a positive for the Talent business.

And then the last one is you know, we have our insights business that we acquired a couple years ago that has the incarceration data and that's another one where we're bringing new products to market and new solutions.

So for talent, you've got the ability to drive penetration. That business is a north of $400 million at run rate in a $4 billion TAM, so there's a lot of penetration growth opportunity there. A lot of our new product focuses around Talent.

You talked about the solution for the hourly work force that we rolled out about a month ago and then we rolled out one a couple weeks ago. It provides more flexibility about which employers our customers want to focus on foreign employee, you know that's another solution that should drive growth. So new products are a big focus of ours in the Talent vertical.

Kelsey Zhu

Super helpful. Thanks so much.

Operator

Thank you. The you the next question is coming from Kyle Peterson of Needham & Company. Please go ahead.

Kyle Peterson

Great. Thanks. Good morning guys. I appreciate you taking the questions. Just wanted to dig a little bit more into some of the talent weakness that you guys kind of saw is – I get that this is yeah more white color based, but I guess is within kind of verticals of the white color workforces, the hiring slowed down. You guys saw in June. It sounds like is that fairly broad based or you know that concentrated in one or two verticals or anymore color there would be really helpful.

Mark Begor

It's pretty broad based. I think you look at them like we do. You see less of them, but in the first half of the year you saw companies left and right announcing either layoffs or hiring freezes.

I think it was Ford a couple of weeks ago announced another white color reduction, if a company is reducing people and making those kind of announcements, they also typically have a hiring freeze in place. So there's less inbound, new hires coming in. So that clearly is not – it didn't just happen in late in the quarter, it's been happening for quite some time as we've kind of nine months into that hiring reduction that has had an impact on, is that we've been able to outgrow through pricing in 2023, through new products, through penetration, in adding new customers in the background screening space, but it's clearly had an impact, and we expected it to continue to be an impact in the second half and we've laid that into our framework.

Kyle Peterson

Makes sense. And just a follow-up, on the cost side, good the additional cost savings you guys identified. This quarter it's kind of offset some of the weaker volumes. But you just wanted to think about you know if we continue to see challenging volumes whether it's through mortgage or background screening or any other areas of the business. Are there any other efficiencies and levers that you guys might be able to pull, you know if we're in kind of a prolonged period of weaker volumes and revenue per share, or you guys kind of at approaching to the max efficiency here.

Mark Begor

I think as you know we're going to have a $65 million of run rate benefit next year, because a lot of the actions from the broader cost and cloud program that we have in 2023 are in the second half, so that'll be a benefit. And we've talked previously that we still expect to get further cloud efficiencies in ‘24 and ‘25 as we complete the cloud.

We're at 70% now. We still got that remaining 30% of Equifax to complete over the next couple of years, and as we complete that cloud we expect to see further efficiencies that will benefit our margins and in margin rate in ‘24 and ’25, including the carry over benefit of the cloud actions that we're taking you know in broader restructuring in 2023.

John Gamble

And just as a reminder right, the actions we've already taken and the site control we have on cost broadly are allowing us to drive our margins higher in the third quarter and the fourth quarter substantially. So we think we've taken pretty significant actions already, which are allowing us to see nice improvement in margins.

Mark Begor

And maybe one other point, I wouldn't think about the actions is being aligned with a revenue decline, that's not how we operate our business. The program we announced in February you expected. We talked about it last year that we would be reducing our costs as we complete the cloud. This is something we've been talking about for years.

And as we said in February, in April, and again today, we're just seeing broader opportunities to improve our efficiencies as we get further into the cloud. The real backbone of these cost efficiencies and margin expansions are what we've talked about for the last three or four years and it's really driven by our ability to get closer to completion of our cloud investment.

Kyle Peterson

Make sense, and that’s helpful. Thanks guys.

Operator

Thank you. The next question is coming from Andrew Jeffrey of Truist Securities. Please go ahead.

Andrew Jeffrey

Good morning. I know nature of course is a vacuum Mark, but I'm just going to ask you one question, sort of high level. When I look out at the U.S. economy and think about perhaps a soft landing or a Goldilocks environment, however you want to consider it. It strikes me that there are there are parts of Equifax’s business that benefit from the rate of change in the economy, either improving or deteriorating, and if we're sort of in stasis. Does that impact your business?

I'm thinking about UC, I'm thinking about mortgage. Just broadly, is change as important regardless of direction? Obviously improving is better than deteriorating, but is change a meaningful impact to your growth rates, your revenue growth rates?

Mark Begor

Yes, you've got to kind of break some pieces apart there. Mortgage obviously has had a huge impact on our business. It's been – we've never seen a mortgage decline like this to be 40% below – well over 40%. I think it's 45% below historic levels in the second half. It’s just never happened before, that's going to recover right.

It's just a matter of when will it return to call it norm, that minus 45 and that'll be a very positive thing for Equifax, and whether it's ’24, ‘25 or ’26, the mortgage market is not going to stay at this level. People are going to buy houses, people keep moving and then add on it at some point. When rates start coming down again from these higher levels which should happen, there'll be a refi element, so that's kind of mortgage.

We're very pleased, and I hope most of our investors are of our ability to continue to drive the 80% of Equifax it's not mortgage quite strongly in what you characterize as a uncertain economic environment, the diversity of our businesses. If you look at Equifax 10 years ago being primarily a credit bureau and now you – we're talking on this call predominantly around our talent vertical and government vertical that didn't exist 10 years ago.

And talent you know still performing even with a macro impact and government super strong just because of the power of the unique solutions that we have. So I think that's the kind of the underlying strength of Equifax, is our non-mortgage businesses are super strong and lay on top of that, the new product initiative, it's not an initiative, it's really how we operate. We're a product led organization leveraging our differentiated data and our cloud capabilities.

You know the 14% vitality in the quality, that's great momentum for the second half in ’24 and ’25, meaning that we're seeing we can leverage our differentiated data assets, our product led culture and capabilities and cloud and put new solutions in market. And those new solutions are higher price points that are going to expand our margins going forward. So that's a real positive. And then the underlying macros, I think the diversity of Equifax plays into that.

So is there going to be a soft landing? My personal view is there is. I think we're kind of already feeling it and seeing it with inflation down to 3%. That's going to head towards where the fed wants it and unemployment is so low, people are still working. That's a pretty good economic environment for all businesses, but importantly ours going forward.

And then you lay on top of it the completion of the cloud from a kind of timing standpoint over the next year and change. And the cost benefits that you’re seeing this year and margin benefits this year that carry into 2024, those are quite powerful in our ability to expand our free cash generation. And have – as we get into ’24. ‘25 and ’26, have significant excess free cash flow to return to shareholders at the right time.

Andrew Jeffrey

Now, as usual a very comprehensive, thoughtful answer. Thanks.

Operator

Thank you. The next question is coming from Jeff Meuler of Baird. Please go ahead.

Jeff Meuler

Yes, I just want to make sure I'm understanding the dynamic on mortgage underwriters moving the employment and income verification in-house. Are you saying that that's just for the manual portion of the verification and you are not losing them as a client?

Mark Begor

Correct. Yes, that's where we've seen it Jeff. In part of it was that customers came to us and were looking for lower pricing on the manual efforts that we do for them. I think you know we have an operation in Iowa where we do that. We opted not to chase price down because it's a low margin solution now for us, but an attractive one, and some of them moved that in-house and it was you know meaningful. Its 300 basis points of the mortgage out performance in the quarter.

But no, it's isolated to that manual effort we were doing four customers. We've just seen less activity there and it's logical when you think about a mortgage originator that just has more people doing less mortgages, they can do some of that themselves. But we haven't seen the impact on the instant verification side, which is where as you know, where all our revenue and margin is.

John Gamble

You've also heard some of our competitors talk about growing their manual business, and again we think that's part of the ship. This is just business that this low margin that we're moving away from.

Jeff Meuler

And can you give us any sense of how much revenue you generate from doing the manual verification?

Mark Begor

We didn't give totals, but we did talk about it as a level of decline right. So we said it impacted our out performance by about 300 basis points so.

Jeff Meuler

Got it. And then Mark you answered the Verifier competition question a bit differently today or at least I've perceived your answer a little bit differently today. And John, you just kind of alluded to, hey, some of the competition is manual and that's low margin. But you can see the credit file inquiries, so you can triangulate share for verifier mortgage. If you look at the non-exclusive records that you have, have there been any recent share changes for digital verifications. Thank you.

Mark Begor

Yes, not that I would characterize as meaningful Jeff, but we don't see it in our marketplace, but we hear our so called competitors talking about their revenue growth and I don't know what the real numbers are that some of those smaller players have, but they are definitely getting revenue somewhere. We just don't feel it in our business but we continue to watch it.

Jeff Meuler

Got it. Thank you.

Operator

Thank you. The next question is coming from Craig Huber of Huber Research Partners. Please go ahead.

Craig Huber

Great, thank you. You obviously mentioned a 14% vitality index. Can you give us a flavor of some of the areas of the new products that you're most excited about here is you kind of think out. What's working really well? Where do you think is the biggest opportunity to growth revenues?

Mark Begor

Oh man, how much time do we have, but I'll try to be precise.

Craig Huber

You can give top two or three.

Mark Begor

Yes, I know but first time I’d start with the 14%. When we set the 10% vitality goal, remember our long term run rate, pre-cloud and pre the 10% goal was 5% to 7%. And I think 5% to 7% is what most data analytics companies do and 5% to 7% is a big number. To have 5% to 7% of your revenue from new products introduced in the time frame, we picked three years. That's a pretty vibrant innovative company. We set a goal for 10% and since we set the goal we've been over achieving it and 14% in the quarter and 13% for the year.

So I would start with that I'm energized about the broad based ability at Equifax across all of our business units to leverage our differentiated data, our cloud capabilities or bring new solutions to market. That's the company that you want to have as a partner if you're a customer. Someone who is innovating to bring new solutions, because remember, all of our products deliver ROI.

We are not Coke versus Pepsi or doing Sprite versus Diet Coke. We're delivering a solution that's going to help our customer to originate more consumers, lower their losses, increase they're marketing hit rates you name it, we're delivering ROI. So what excites me, certainly all of the solutions in Workforce. That would be kind of number two for me beyond the 14%.

Having Workforce Solutions, that I think it was 23% vitality in the quarter, and remember Workforce is the first business at Equifax to get into fully cloud native for over a year now. And they've really been able to unleash, kind of the pent-up capacity if you will to bring new solutions to market and they're doing it in every vertical. Mortgage 36, delivering a 36 month solution of historical data to our mortgage customers.

To the earlier question from Jeff a few minutes ago, our so called startup competitors can't do that. They don't have the 630 million historical records. So uniquely we can deliver a 36 solution that's integral now to many mortgage originations going back three years. So that historical data is something that super energizes me.

I'll jump to USIS. Our new mortgage credit file that includes the NC+ plus, 14 NC+ attributes. Really energizing to have multi data assets delivered. The mortgage credit file is, looked the same for 40 years. We're now making ours differentiated and because of the scale of the cell phone utility database that we have, our competitors can't do that. So only Equifax can have a differentiated mortgage credit file, super exciting. The solutions for talent that we already talked about, also super exciting.

So we're really focused on our new product initiative. We think it's going to drive top line in margin expansion going forward, and you're seeing us outperform the 10%, which we think is a good thing for the future.

Craig Huber

My final question, as you sort of look out beyond this weak sluggish environment here into ‘24 into 2025, a lot of your business to recover very nicely next year and in the year after. So what areas are you most excited about when getting to a better economic backdrop.

Mark Begor

Certainly mortgage, which we already talked about that. Mortgage 40% below, 45% below kind of historic normal market levels. That recovery which is going to happen at some point, whether it's ’24, ‘25 or ‘26 and how it meters in, that's going to be good news for Equifax. So it’s going to be very high incremental margin in EWS and USIS is that recovery takes place.

You know at some point there'll be more stabilization in the hiring market. Once employers get more comfortable around the economy, I would expect there'd be less hiring freezes and you know some level of employment improvement going forward. So that you know is going to be a positive you know for Equifax.

When the subprime market stabilizes, that's had an impact us on us over the last three quarters in USIS. That'll be you know positive for us going forward.

Craig Huber

Great. Thank you.

Operator

Thank you. The next question is coming from Andrew Nicholas of William Blair, please go ahead.

Andrew Nicholas

Hi! Good morning. Thanks for taking my questions. First question I wanted to ask is, just maybe a point of clarification. I hear the acceleration commentary and what makes you confident in that through the back after the year. Just wanted to make sure I understand it. Is there any change to kind of your economic assumptions for the second half as well? So you're still baking in some level of [inaudible] down on the outside? Okay.

Mark Begor

Correct. 100%. It's just really our visibility around pipelines, government we talked a bunch about, that we can see just a visibility in that business and in the others, but we still have the same view of a no change in the macro.

Andrew Nicholas

Got it. And then for my follow-up, a different topic entirely. Mark, you spend a decent bit of time on artificial intelligence and how Equifax is well positioned to leverage it going forward. I'm just wondering if you could speak to kind of the cost side of that equation. How expensive is it to leverage the cloud and Google Vertex in an environment where I think chips are expensive and there's some shortages there. Just wondering how you think about cost and whether or not that's a meaningful consideration when you go down the AI path, the large language model path.

Mark Begor

Yes, so what I've talked most about today and what our principle focus in is around using AI to really manage large data and multi data sets to deliver better performing scores, better performing models. You may remember we rolled out a solution called One Score in April that combines some of our differentiated data assets across USIS. We used AI modeling in that and that provides significant performance enhancement, and when you deliver a performance enhancement it's more valuable when you charge a higher price.

So that's going to be our principle focus around AI and no, there's not a high cost in completing AI. There's actually a bunch of efficiencies from a DNA perspective of using AI because it's just faster. You can complete more work and we'll be more productive if you will in delivering these higher performing solutions.

I thought where you were going was in our operation side, where we expect to use some of the AI capabilities to improve our call centers, our operating centers. That will clearly be a leverage point for us in 24 and beyond. But our – I believe our big leverage is going to be around having more sophisticated higher performing, products scores, models and solutions.

Andrew Nicholas

Makes sense. Certainly having everything on the same Data Fabric is helpful to that too.

Mark Begor

Thanks Mark.

Operator

Thank you. The next question is coming from Shlomo Rosenbaum of Stifel. Please go ahead.

Shlomo Rosenbaum

Hi! Good morning. Thank you for taking my questions. Hey Mark, I'm just asking my first question. I want to focus over one, some of the questions that came in earlier about the manual verifications to move back in-house or you know you're talking about there's some competitors over there.

Like Truework has a product over there that they're very focused on the manual verifications. And I just want to ask you about strategically, as you move back a little bit from that because of pricing, are you concerned that that's going to give them kind of an entrée into the client base, which will also give them potentially the ability to move Truework to a top of waterfall position, to take advantage of potentially getting kind of like ADP data which is not, it's not unique to all the players that are in there. And so strategically how are you thinking about that, in terms of you're not wanting to cut cost in there and then I have a follow.

Mark Begor

Yes, and that one we are going to be obviously focused on maintaining our strong customer relationships. I don't know what Truework’s revenue is. Maybe it's $15 million or something or $20 million. It's a fairly small player. It doesn't have really any scale differentiated data assets. We've got at the end of the quarter 161 million records. I don't even know what their record count is, but we certainly watch them. We just don’t feel that they are having a meaningful impact on our business, but we certainly are keeping an eye on them.

John Gamble

Shlomo, the other thing that’s happening right, as we continue to rapidly grow our database, so the need to do manual verifications when you use Equifax continues to decline substantially, right. So given where we are at 120 million uniques against U.S. non-firm payroll of say 160 million, we're getting to the point now where the need for a manual verification when you use Equifax is very small.

Shlomo Rosenbaum

Okay, great. And then hey John, also I have a question for you. I'm just trying to understand the lowering of the EPS guidance. Like the midpoint is $0.22. Even if I assume that $40 million of lower revenue coming from mortgage is above 90% contribution, I mean that would be like all of that reduction, but there's also other stuff that's doing better on USIS and government talent and you also increased by $10 million the cost savings program. It just seems to me like the midpoint of the guidance and the EPS was lower to a lot more than it needed to be. Can you comment on that?

John Gamble

Sure. So really the driver was lower mortgage revenue, right. We said Workforce Solutions workers revenues down over $40 million right, so applying a very high margin to that you do get a very substantial amount of operating income.

We said non-mortgage is slightly better, so for the entire company I know pieces have moved around, but in total non-mortgage is slightly better. So that wasn't a big driver a positive operating income in the changing guidance. And really the difference between the reduction of over $40 million in mortgage revenue and the down $25 million we talked about is just heavily FX which has very little flow through in terms of positive operating income,

So it's really driven by the fact that we lost very high margin mortgage revenue, I mean EWS, and that really drove the reduction right. Yes, there was some cost savings, but again they weren't a big number of $10 million of incremental that we talked about. You can think that was kind of split between capital and cost. So not a big driver of recovery, so the big movement is just related to the fact that we saw the reduction in mortgage revenue.

Shlomo Rosenbaum

Thank you.

Operator

Thank you. The next question is coming from Heather Balsky of Bank of America.

Please go ahead.

Heather Balsky

Hi! Thank you for taking my question. I know there's been a fair number of questions already on the acceleration in non-mortgage EWS revenue. So I just wanted to kind of follow-up here, because I think we're backing into something in a healthy double digit range for the fourth quarter. And you've outlined the drivers, but I guess where do you expect to see the most meaningful acceleration in your business. It sounds like the macro isn’t changing. So just trying to understand how you go from how you did this quarter to double digit growth in the fourth.

John Gamble

So Heather, if you look at it sequentially right, what we're talking about here in terms of EWS is really nice sequential improvement. We talked about this in government right, and we think government revenue is a big driver of our improvement. When you compared to last year, obviously last year what you saw was some weakening in the back half of the year as you saw weakening talent markets, etc.

So the compare is easier, but if you just look at sequentially the performance we're talking about, we expect government to improve substantially as you move through the rest of the year. Mark covered very completely what the drivers of that are. And then sequentially we're also talking about seeing talent get a little better from where we are today.

A lot of it driven by product, again, as Mark covered in his prepared margin and earlier answers. And then also on consumer finance we kind of think we've hit a bottom and we're going to – we'll see slight improvements in consumer finance sequentially, which again given what the second half of last year looked like, gives us growth rates that are substantially different than we saw on the first half.

So the big driver in sequential improvement certainly is government. We're seeing some sequential improvements in the other segments in EWS, but that's how we think about the improvement and we think the trend we've already seen in government supports the level of improvement we're talking about.

Mark Begor

And then outside of EWS, I think as we talked earlier, both USIS and international were above our expectations in the quarter and we expect them to perform well in the second half also.

Heather Balsky

Okay, thank you for that. And then just another question with regards to the outperformance at EWS versus the mortgage market, you called out 17% this quarter. Is that the new run rate factored into your forecast or is there some assumption that the impact from the manual polls going in-house kind of worsened in the back?

John Gamble

So again, adjusting for the impact of manual, we're at about 20 we're at about 20 last quarter. So yes, we'll have another impact. We’ll have more impact as we go through the rest of this year in terms of the lower levels of manual revenue, which again very low margin right so.

Mark Begor

Fairly low revenue.

John Gamble

And fairly low revenue. So we'll see an impact from that if we go through the rest of this year, but we continue to expect to see nice out performance in the mortgage market.

Heather Balsky

Got it. Thank you.

Operator

Thank you. The next question is coming from Toni Kaplan of Morgan Stanley. Please go ahead.

Toni Kaplan

Thanks very much. One of your competitors launched a product this week that allows consumers to choose to share their employment information directly from their payroll provider, and this is a model that's been in the market obviously. I guess, do you see the market moving more that way in the future or parts of the market moving that way? And is there any benefit for you to offer that type of model in addition to your traditional model or does that not make sense for you? Thanks.

Mark Begor

We have a solution that does much of that Toni. We just see it, that there's a ton of friction for the customer, whether it's a mortgage originator, an auto lender, and a lot of friction for the consumer. And remember, if you think about our data set, the 161 million records that we have today or 120 million SSNs, you know that's against 160 million non-form payroll. So in non-form there's 40 million people not in our data set that are out getting mortgages and doing other products. And then when you add pension and the self-employed individuals, there's another call it close to $100 million in total.

So the solution that was announced, it’s actually been in the market – I think Experian had that in the marketplace for quite some time. I'm not sure what kind of traction they're getting with it, but we just find that if there's an instant record available, it's always going to trump any of these friction filled processing, where the consumer has to put their user id and password in.

In this example, the consumer would have to give there, in my case Equifax HR user id and password in order to get to my payroll records, in my sit, in my case, and most consumers that are employed in W-2 non-form payroll would have to provide those credentials if you will in order to get to that.

That's against our company policy and every company policy. So there's just a ton of friction and then it's just the consumers required to do it. Where I believe there is value in some of these alternative solutions and as we talked earlier on the call, we have a manual verification team where we do manual for our customers.

There’s another version of what you're talking about, is in the records that we don't have. So think about the, call it $40 million non-form payroll, the $30 million to $40 million self-employed, the $20 million to $30 million pensioners. Those records, if they are not doing a solution with Equifax like our manual or our conventional solution or something like we described, it's being done manually by the company, whether it's a mortgage originator, auto lender, you pick your solution. So it's replacing that manual to really drive speed.

That's where there's value in it, but just - it's very very hard to get a lot of penetration with these solutions because of the significant friction for the consumer. And my view and what we see in the market place is it won't replace instant records.

Toni Kaplan

Yes, that makes sense. I want to ask about the technology transformation and the potential revenue opportunities. So I think about it in two ways. So one, sort of faster new product introduction and you're already seeing that with the 14% Vitality Index and that was greater than last year too. Like are you already getting some benefits from the technology transformation or should we expect that to really even accelerate next year.

And then I think the other benefit is the being always on and I guess I'm not sure how to quantify that benefit, either like how frequently are you not on today and sort of what's the incremental from always being on thanks.

Mark Begor

I think you're nailing at Toni about the two elements. And so on the first one you talk about really new product rollouts. The ability to roll out new products, and remember when you think about the 14 for Equifax, remember there's a bifurcation of where the different businesses are.

USIS is well below the 14, because they haven't completed the cloud yet. EWS is well above 14, because they completed the cloud and are really driving those new products, and international is slightly south of the 10 or the 14. So as the businesses complete the cloud, particularly USIS and international, we would expect them to move towards the 10%, which is going to be a good thing, it's going to drive new solution there.

So that's clearly one of the benefit to the cloud is the ability to leverage those scale differentiated data assets to bring more new solutions to market, and allow us to deliver long term that 10% vitality goal.

Your second point is an excellent one also, and in my view it's going to be more impactful in USIS and international. Although EWS is getting real benefits of being in a cloud environment and how they're able to operate their business. The always on stability is clearly a benefit for them. The bigger benefit for Workforce is the ability to scale their data assets. There's no way they could have doubled in the last five years their twin data records without the cloud, period. It just is no way and we've gone – I think in 2018 we had something like 300,000 employers contributing to the data set, last quarter was 2.8 million. It wouldn't have happened without the cloud. So that that's another benefit of the ability to manage data that's more Workforce oriented.

On the benefits of always on and faster data transmission, we believe that that's going to result in market share games. And particularly in USIS and international, where their credit file business is typically a customer will have a primary and secondary as you know. And we would expect by being always on, we're going to be a more valuable partner and allow us to move where we're tertiary or secondary into those secondary and primary positions. And I mentioned in my comments that we have deal pipelines in USIS where customers are talking to us about moving our market position, because of our investment in the cloud.

Now, when will that show up in USIS revenue? Likely in ‘24 and ‘25 and ‘26 as they get you know post cloud completion and the same thing should happen in international markets where you've got that same dynamic of a customer using us and one of the other guys. We're going to be a more valuable partner being always on.

Toni Kaplan

Super. Thank you.

Operator

Thank you. The next question is coming from Ashish Sabadra of RBC Capital Markets. Please go ahead.

Q – Ashish Sabadra

Hi! Just wanted to ask on the OS mortgage business where the out performance compared to inquiry was much wider compared to the first quarter. There was common tree in the prepared calls around improved pricing, but I was just wondering if there was another step up in pricing in the second quarter or was this more driven by mix or other tailwinds.

Mark Begor

Yes, truly carry over the pricing comment was really for both businesses. EWS did their normal one-one price increase that's just carrying through. But so no incremental price increase, we have no intention to do that. We basically focus on doing annual price increase in all our businesses.

As you may remember back in January or February in the earnings call, we talked about a larger price increase in USIS related to one of our partners who has a credit score and everyone knows who I'm talking about, its FICO, who put through a price increase in both Equifax and Experian deliver that price increase to the marketplace when they increase the price of their credit score.

So that holds through in mortgage is what we're talking about, a fairly sizable pricing crease that we mark up to maintain our margins and there's no change in that, that's just rolling through the year.

John Gamble

And if your comparing first quarter to second quarter. The full effect of the price increase Market talking about didn't impact the first quarter, but it did the second quarter.

Q – Ashish Sabadra

Yes, that's very helpful color. And then maybe just on the background screener side, have you seen any change in their use of the waterfall model or any change in the market dynamics there? Thanks.

Mark Begor

Yes, I think we talked about the big market macro of less hiring taking place in ‘20. It really started two, three quarters ago. It started in the second half of 2022 when you saw companies announcing hiring freezes and layoffs and that's carried through the second quarter. That's kind of the macro that's taking place.

The real opportunity for us is that we have fairly low market share of using our instant data, whether it's employment or education, our new education solution, newer education solution, for background screen. So that's where we're rolling out new products and you’re working to add new customers and get them to convert from doing manual employment verification to using our instant solution.

Q – Ashish Sabadra

That's helpful. Thank you.

Operator

Thank you. The next question is coming from Seth Weber of Wells Fargo Securities. Please go ahead.

Seth Weber

Hey! Good morning guys. Mark, you mentioned the resumption of student loans that's expected to pinch credit scores, maybe weigh on consumer balance sheets. Can you just talk about how you're thinking about the timing of that rolling through? If there was a lag effect and any dynamics between prime and subprime categories? Thanks.

Mark Begor

Yes, I think as you know, there's a lot of political elements to that. That has somewhat been episodic as far as announcements and then legal challenges on it. If it happens, it would be in the second half. As you point out, it will put pressure on some of the balance sheets or operating statements, operating available income for some of those recipients. It does skew to subprime consumers. So to put more pressure on those that have outstanding student debt that's been on pause for a couple of years if that actually does get resumed.

I personally think it'll be absorbable inside of the kind of economic environment that we have. What's positive for those impacted consumers is that there are individuals, most of them working. So they still have – in this employment environment they've got you know jobs and they'll have to adjust likely they're spending behavior. It may crimp their ability or desire to get new credit, but it should be a fairly small portion of the full population.

Seth Weber

Got it, thank you. And then maybe just a quick follow-up for John. I think the – just looking at your margin guidance for the year, the international segment, I think the guide for the full year implies the fourth quarter is north of 30%. Is that the right way to think about it? And is there something going on there that creates this kind of hockey stick move in the back half the year, in the fourth quarter. Thanks.

Mark Begor

I think all the business. John, I’ll let you jump in, but as you know international, USIS and EWS are a part of the cloud and broader cost restructuring program that we increased by $10 million in the second half. So all the businesses, that's primarily second half oriented. There wasn't much in the first quarter of that cost program, there was some in the second, but it really picks up steam in the third and fourth so which is why we have to carry over benefit in 2024 that will be a good positive for us next year.

Would you add anything on international specifically?

John Gamble

No, we are expecting to see nice improvement in international margins. I think the number you're quoting might be a little lofty. But we are expecting to see nice improvement in international margins and it's driven by the fact that they are driving revenue improvements. They generally get stronger revenue in the fourth quarter. We are expecting that to continue and they are doing a really nice job as Mark said on cost on cost management. So those are the drivers.

Seth Weber

Got it, okay. Thank you, guys. I appreciate it.

Operator

Thank you. The next question is coming from George Tong of Goldman Sachs. Please go ahead.

George Tong

Hi! Thanks. Good morning. In EWS you talked about how mortgage originators are taking some of their manual verifications in-houses as volumes come down. Can you talk about in sourcing trends you're seeing in the non-mortgage business in response to volume and/or pricing trends?

Mark Begor

George, are you talking about like in auto or background screening or government, what?

George Tong

Yes, non-mortgage broadly, in non-government, non-mortgage.

Mark Begor

Maybe quite simply is we're not. We are not seeing any impact of kind of in sourcing if you will income or employment verifications in non-mortgage. And the mortgage piece is really quite specifically around the manual operation that we have in Iowa.

We saw some pressures around us reducing – requests from customers for us to reduce our pricing which would impact our margins, which are thinner if you will there than they are instant verifications, because they have capacity to do the manual verifications in house and we decided to let those move in house, but not on the instant side and not in the non-mortgage.

George Tong

Got it. And you mentioned a strength in the USI business from increased shopping activity. Can you elaborate on some of the trends you're seeing there and how sustainable that shopping activity is?

Mark Begor

As George, we've been talking about it for, I don't know four, five quarters. As rates were coming up, we're just seeing consumers spent more time shopping around for mortgages, and as you know, every time they click on mortgage originator website, that mortgage originator will generally before they spend much time responding they have to understand who that consumer is so they pull a credit file to see whether they are going to qualify.

So that is clearly a change in behavior than call it the low interest rate environment we had in 1920 and ‘21 and the early parts of ’22, where consumers were really just taking the first mortgage they clicked on, because it was lower than their existing mortgage and a refi or met their expectations. They are just more shopping in this higher interest rate environment, which does benefit USIS.

And as you know George, the EWS is generally – there's multiple pulls by EWS. There is more polls on the credit file side. But EWS is generally in the closed mortgages where they see their activity when they get further into the pipeline versus that early shopping behavior. And this is just really a prequel that the mortgage originator is doing to see whether – you know how much effort they're going to put into it and really how can they respond to that consumer about what they might qualify for.

George Tong

Got it. Very helpful. Thank you.

Operator

Thank you. At this time I'd like to turn the floor back over to Mr. Burns for closing comments.

Trevor Burns

Thanks everybody. If you have any follow-up questions, let me and Sam know, we'd like to get on the phone. Otherwise have a great day.

Operator

Ladies and gentlemen, thank you for your participation. This concludes today's event. You may disconnect your lines or logoff the webcast at this time and enjoy the rest of your day.