Morgan Stanley

APRIL 2020

DEAR FELLOW SHAREHOLDERS:

While typically our annual letter to shareholders focuses on the previous year, these are not typical circumstances. As I write this letter, we are in the midst of a global public health crisis which is causing serious humanitarian issues, as well as economic ones. The recent spread of the Covid-19 virus has presented extraordinary challenges to governments, the global economy and markets around the world.

The loss of life due to the virus is devastating, and public health authorities and medical workers are doing everything in their power to stem the tide of the virus. Many who have not been directly impacted by the virus have experienced severe indirect effects, with millions of people losing their jobs overnight. It is essential for governments to act as aggressively as they can and to focus, as they now are, on the surge in unemployment and the necessary significant stimulus measures in support of consumers, small businesses and corporations. At the same time as governments and health organizations have tried to contain the spread of the virus, the U.S. Federal Reserve and other global central banks and regulators have taken extraordinary and necessary steps to ensure liquidity in the markets.

At Morgan Stanley, we have taken measures to prioritize the health of our employees and their families, and to be prepared operationally to serve our clients and help them navigate uncertain markets. We have benefited in this period from robust business continuity planning and from years of investment in our technology infrastructure. Approximately 90% of our employees are currently working from home and continuing to serve our clients. I am proud of the commitment our employees have shown to our clients and to our Firm in these extraordinary circumstances. The Operating Committee and I recently committed to them that their jobs are secure for the remainder of the year and that there will be no reduction in force at Morgan Stanley in 2020.

LARRY LETTERA / CAMERA 1



JAMES P. GORMAN CHAIRMAN AND CEO

While the current situation is gravely concerning, we have weathered serious events and extreme market volatility before, and the fundamentals of the financial system are much stronger today than in the past. I am pleased to say that we and many of our peers have the capital and the liquidity to be well-positioned to work with governments, central banks and regulators to be part of the extraordinary effort it will take to assist in getting the global economy and global markets back on track. Our more than 15,000 Financial Advisors are also well-prepared to work with our individual investor clients to help ensure that their financial futures remain secure, and our Morgan Stanley at Work platform is positioned

to reach investors through their employers to provide advice, education and guidance as the current crisis creates an uncertain environment for saving and investing.

2019 FINANCIAL PERFORMANCE

While in the current environment 2019 seems like a long time ago, it is important for us as shareholders to note that last year was a strong year for Morgan Stanley and our financial performance was one of the best in our history. Over the past decade, we have reshaped our business and reset our strategy, while making significant investments in technology and talent. This has led to substantial earnings growth while increasing earnings stability. Over the next five years, our goal continues to be to shift our business further, emphasizing durable sources¹ of revenues in each of our businesses that will support a base level of profitability in periods of market disruption. Long-term sustainable success will also require continuing to invest in and enhance our culture, ensure our workforce increasingly reflects the diversity of the societies that we serve, and develop the next generation of talent to lead this Firm in the coming decade.

Morgan Stanley reported record revenues, pretax profit² and net income³ for 2019. We delivered four consecutive quarters of \$10 billion-plus revenues—a consistent, stable

WINNING IN THE MARKETPLACE 2019 HIGHLIGHTS

- No. 1 in Equity Sales & Trading revenue wallet share⁷
- No. 1 Underwriter of global initial public offerings⁹
- No. 2 Underwriter of global equity offerings9
- No. 3 Advisor on global announced and completed mergers and acquisitions⁹
- No. 1 in managed accounts, with \$1,185.1 billion in assets¹⁰
- No. 1 in Barron's Top 100 Financial Advisors, with 39 listings
- Lipper's Fixed Income Group of the Year (Large Company) for 3 years in a row
- Over 80% of mutual fund assets in 4- and 5-star Morningstar rated funds¹¹

performance that resulted in record annual revenues of over \$41 billion, with strong results across all our businesses. Return on average tangible common equity (ROTCE) of 12.9%⁴ was within our target range for the year.

By building complementary franchises in Institutional Securities, Wealth Management and Investment Management, we reoriented Morgan Stanley over the last decade to derive a greater share of revenues from durable sources¹ in each of these businesses. In 2018 and 2019, these durable sources provided well over half of our Firmwide revenues. Our leading integrated investment bank remains a key competitive advantage that has allowed us to take share and grow revenues despite a shrinking industry wallet. At the same time, the contribution of our wealth and investment management businesses continues to grow and drive overall profitability. Our management team will continue this growth and advance our strategic

objective of sustained higher returns to increase shareholder value.

2020 marks the 85th anniversary of Morgan Stanley. This is a moment not only to reflect on our successes and celebrate the Firm we are today, but also to look at the future and the strong, diverse and stable Firm we are becoming. Our continued success is made possible by the disciplined execution of our strategy, but it is our culture that truly positions us for long-term sustainable success. Over the next few years, we will continue to build and enhance our culture and develop the diverse talent and global leadership that will guide this Firm forward.

EXECUTING OUR STRATEGIC PRIORITIES

The Board of Directors and executive management team evaluate our strategy each year and refine our goals and priorities to ensure we are working for the long-term benefit of our shareholders. After successfully accomplishing our 2018–2019 strategic objectives,

EXECUTING OUR STRATEGY

2019 HIGHLIGHTS

- 27.2% pre-tax margin⁵ in Wealth Management
- \$2.7 trillion in Wealth Management client assets
- Combined assets¹² of U.S. bank subsidiaries increased to \$219.6 billion
- Fixed Income Sales & Trading full year revenues of \$5.5 billion
- Equity Sales & Trading revenue wallet share of 20.7%⁷
- #1 in active equity net inflows percentage in Investment Management¹³
- Over 75% of long-term client assets (over \$280 billion) are managed with ESG investment principles in Investment Management¹⁴
- 73% Firmwide expense efficiency ratio⁸
- \$7.5 billion of total capital return¹⁵

we have articulated new two-year objectives focused on further improving efficiency and shareholder returns. Our strategic objectives are aimed at driving earnings growth as well as increasing the durability of those earnings. Across our business segments, we have platforms with scale benefits and have created specific action steps that position us for growth.

Our Wealth Management business continues to demonstrate financial stability, benefiting from scale and secular trends such as the shift to fee-based assets. In 2019, the business reported revenues of over \$17 billion and the pre-tax margin⁵ was 27.2%, increasing 100 basis points from 2018. 2020 marks a new chapter in our Wealth Management strategy. In February, we announced our intent to acquire E*TRADE—a leading financial services company and pioneer in the online brokerage industry—by the end of this year. This acquisition will significantly increase the scale and breadth of our Wealth Management business. Morgan Stanley's full-service, advisor-driven model coupled with E*TRADE's

direct-to-consumer and digital capabilities, will allow the combined business to fill product and service gaps through complementary offerings and enhanced digital capabilities. It will position us as an industry leader across all three channels: financial advisory, workplace and self-directed. This acquisition represents an extraordinary growth opportunity for our Wealth Management business and a leap forward in our Wealth Management strategy. In addition, this continues the decade-long transition of our Firm to a more balance sheet-light⁶ business mix, emphasizing more durable sources¹ of revenue. We look forward to discussing this in more detail once the transaction closes.

In the meantime, we are supporting our financial advisors with cutting-edge technology and enabling them to deliver a unique product and set of services to clients that will be our competitive advantage and will support asset consolidation. Through the acquisition of Solium, now branded ShareWorks by Morgan Stanley, we are efficiently servicing

the mass affluent population to capture new clients and assets through the workplace. Furthermore, the acquisition of E*TRADE will create a leading offering in workplace wealth by combining E*TRADE's stock plan business with our ShareWorks platform. We are enhancing and investing in our financial wellness and retirement offerings, and expect to add new corporate clients by leveraging the relationships we have built through our institutional business. This more fulsome suite of products allows us to deliver services to an even larger base of employees beyond stock plan participants. We will be able to provide a compelling offering for all our relationships, servicing the ultra-high and high net worth segment with financial advisers and more mass affluent clients through the workplace. This business has compelling scale benefits between our core competency of serving ultra-high and high net worth individuals and our recent expansion into the workplace. Accordingly, we believe that Wealth Management will be a 28%–30% pretax margin⁵ business in 2021.

Investment Management is a business positioned for growth, and we believe we can deliver differentiated value to our clients in areas where there is industry fragmentation. Last

FORTIFYING CAPITAL AND ENHANCING LIQUIDITY 2019 HIGHLIGHTS

- Common equity tier 1 capital ratio standardized approach of 16.4% as of 4Q 2019, with \$73.0 billion in common equity
- \$217.5 billion global liquidity reserve as of 4Q 2019

year, we reported revenues of \$3.8 billion, led by robust asset management fees, strong investment performance and long-term asset inflows. We have launched a number of new products successfully since 2016 that have broadened our revenue base, made us more relevant across the client spectrum, and translated into material revenue and asset growth. Our alternatives client platform is at scale, and there is strong secular growth in private alternatives. We are also seeing strong organic growth in our existing high-performing private

funds. These strategies, and investments in our client franchise more broadly, will be a very important component of future growth.

Our Institutional Securities franchise and footprint is extremely strong and our brand is closely tied to our institutional presence. Over the past decade, we have defended and expanded our footprint, gaining share over the last five years in the face of a declining industry wallet. We have benefited from the stability of the leadership and our commitment to a global client footprint, and expect to hold and gain further share across

OUR STRATEGY

WHAT WE DO:

Advise, originate, trade, manage and distribute capital for governments, institutions and individuals, and always do so with a standard of excellence.

HOW WE DO IT:

Execute in a way that is consistent with our values and, whenever possible, deliver more than one part of the Firm.

WITH WHAT RESULT:

Deliver strong returns for our shareholders, build long-term value for our clients and offer highly attractive career opportunities for our employees.

these businesses. Our Investment Banking franchise consistently ranks in the top three of the global league tables in advising on mergers and acquisitions and underwriting initial public offerings, and 2019 was no exception. Our Equity Sales & Trading business continued to be a leader and finished the year No. 1 globally in reported net revenues for the sixth year in a row. In Fixed Income Sales & Trading, we reported revenues of over \$5 billion for the third time in the last four years—the highest annual revenues in many years. This business is the right size and well positioned to support our clients.

Underpinning our strategic objectives for each of the businesses is rigorous expense and capital management. We are making numerous investments across all of our platforms to enhance our technological capabilities and take advantage of scale economics. Between these efforts and revenue growth, we expect to achieve an expense efficiency ratio of $70\%-72\%^8$ in 2021. We believe we are capital sufficient and expect to return excess capital to shareholders, subject to regulatory approval, while continuing to invest in the franchise for future growth. As a result of this, and the Firm's growth initiatives and expense discipline, we expect to further drive ROTCE⁴ expansion to 13%-15% in 2021.

We have meaningfully and with intent transformed this business into what it is today. As we execute on the next phase of the Firm's journey, our strategic objectives, assuming a normal market environment, should result as a natural consequence.

STRONG CULTURE AND DIVERSE TALENT WILL DRIVE ENDURING SUCCESS

Executing our strategy and meeting our growth objectives will not be possible without a strong culture and a diverse team of talented employees. Long-term sustainable success lies

in building and enhancing our culture and broadening the diversity of our employees. At Morgan Stanley, our culture guides our employees, and our values inform everything we do: we have a commitment to putting clients first, leading with exceptional ideas, doing the right thing, and giving back. These values honor both our history and our aspirations for the future.

As we head into the next phase of our journey, we will continue to invest meaningfully in our culture. Over the next five years, we will work to enhance our culture of accountability and collaboration, and renew the commitment, energy and focus that we have on living our core values every day. We also want to attract the most talented and diverse people to our franchise and make sure that they receive the opportunities to develop the skills needed to be successful leaders and executives. We are committed to help ensure our workforce reflects the diversity and makeup of the societies in which we operate. In 2019, our summer intern class was over 50% women for the first time, reflecting the gender balance of society. Ensuring that we have a pipeline of diverse candidates is but the first step, and we must now support them in their careers to eventually be leaders in our businesses and divisions.

We have a strong and experienced senior leadership team and our businesses have a deep bench of talent. Nearly 20% of our Operating and Management Committees members are women—a percentage we are committed to improving in the coming years—and the

OUR CORE VALUES

Since our founding in 1935, Morgan Stanley has pledged to do first-class business in a first-class way. Underpinning all that we do are four core values.

PUTTING CLIENTS FIRST

Keep the client's interest first. Work with colleagues to deliver the best of the Firm to every client. Listen to what the client is saying and needs.

DOING THE RIGHT THING

Act with integrity. Think like an owner to create long-term shareholder value. Value and reward honesty, character and diversity. Foster a collegial work environment where all employees feel a sense of belonging.

LEADING WITH EXCEPTIONAL IDEAS

Win by breaking new ground. Leverage different perspectives to gain new insight. Drive innovation. Be vigilant about what we can do better.

GIVING BACK

Serve our communities generously with our expertise, time and money. Build a better Firm for the future through mentoring others.

average tenure of those committee members is 23 years and 20 years, respectively. In each of our business areas, we have strong leadership that reflects our culture and is driving the Firm forward. I am confident of their skills and invested in their successes. The Board of Directors and I are also focused on the continued development of the next generation of leaders over the next five years. We are also committed to providing leadership and bringing the Firm's resources to help ensure a sustainable and healthy future for society.

DEVELOPING CAPITAL AND KNOWLEDGE-BASED SOLUTIONS FOR A SUSTAINABLE FUTURE

As creators and allocators of capital, large financial institutions play a unique role in society, and they have a special platform from which to contribute to that society. In 2019, we announced the Morgan Stanley Plastic Waste Resolution, our commitment to help facilitate the prevention, reduction and removal of 50 million metric tons of plastic waste from rivers, oceans, landscapes and landfills by 2030. We are driving and scaling the investments, partnerships, programs and research needed to tackle the growing challenge of plastic waste. In 2018, we announced a new commitment to provide \$250 billion in low-carbon financing by 2030 across clean-tech and renewable energy financing, sustainable bonds and other transactions that enable low-carbon solutions. We are also committed to reducing our own environmental footprint, and aim to be carbon neutral by 2022 and to source 100% of our global electricity needs from renewable sources. These efforts are built on the back of the Morgan Stanley Institute of Sustainable Investing that we launched in 2013. The Institute works across the Firm, with our clients and with academic institutions to mobilize capital to sustainable enterprises that address the social and environmental issues facing the world today. Since its launch, we have raised and invested capital across a range of sustainable issues including clean and renewable energy, affordable housing, marine conservation and most recently, reducing plastic waste.

In 2017, we launched the Multicultural Innovation Lab, our in-house accelerator program supporting the development of women- and multiculturally-owned, technology-enabled businesses. The Lab is designed to help drive positive economic outcomes for women and multicultural entrepreneurs by providing capital, content, visibility, technical support and connectivity with important stakeholders who might be essential in accelerating the growth of their businesses. We are working to directly address the funding gap, one company at a time.

Most recently, we launched the Morgan Stanley Alliance for Children's Mental Health in February of this year to address the mental health challenges among children and adolescents that are rapidly becoming more pervasive and urgent. Working with distinguished nonprofit partner organizations, the alliance will align the Firm's resources and global reach with the best thinking and practices in the field, strategically working to reduce stigma, increase early intervention and ultimately affect the far-reaching challenges of mental health.

These are some examples of the initiatives we are implementing to help ensure that we bring capital and knowledge-based solutions that contribute to a more healthy and sustainable society for future generations.

LOOKING AHEAD

Morgan Stanley is very well positioned to successfully navigate whatever the next five years bring as we execute our strategic objectives. Over the long term, I am excited about our future and have great confidence in our senior leadership team. Moreover, our strong culture and brand remains our most powerful competitive advantage. We are focused on reaffirming our values and developing the diverse talent that will drive the future of this Firm. I am also proud of our 60,000 global employees who deliver for our clients each day, and want to thank them for their hard work and commitment.

Thank you for your confidence and investment in Morgan Stanley. I am confident in our ability to deliver lasting value to our shareholders. While the world fights back against the coronavirus, we will be doing our part to support our clients and the global economy. Please stay healthy.

JAMES P. GORMAN

James P. Gorman

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

APRIL 3, 2020

KEY INITIATIVES

INSTITUTE FOR SUSTAINABLE INVESTING

Established in 2013, the Institute is advancing market-based solutions to economic, social and environmental challenges, operating from the foundational principle that sustainable investment can only achieve significant scale by attracting a broad range of private sector capital. Through product innovation, thought leadership and scholarship aimed at expanding opportunities for sustainable investing, the Institute is driving capital toward investments promoting sustainable economic growth.

PLASTIC WASTE RESOLUTION

With our global reach and our integrated approach to solving the most complex problems, Morgan Stanley is committed to tackling the growing global challenge of plastic waste in the environment. Through the capital markets and partnering with our clients and employees, we will prevent, reduce and remove 50 million metric tons of plastic waste from rivers, oceans, landscapes and landfills by 2030. Our commitment includes financing and investing in solutions, supporting market research and eliminating single-use plastic from our global operations.

SUSTAINABILITY REPORTING

Over the last two years, we have enhanced our approach to target investor-relevant environmental, social and governance (ESG) data and narratives in our annual sustainability report, in the spirit of the Sustainability Accounting Standards Board (SASB) guidelines. Morgan Stanley is one of the first U.S. banks to map our sustainability reporting narrative to the SASB guidance as appropriate. We have a Firm-level Sustainability Disclosure Committee that provides oversight and guidance on our ESG disclosures.

MULTICULTURAL INNOVATION LAB

A six-month accelerator program designed to help build and scale women- and multiculturally-owned, technology-enabled startups. Each company accepted to the lab receives a cash contribution from Morgan Stanley, workspace at our headquarters, and an opportunity to pitch to the investor community with our support. In 2019 — the third year of the program — nine companies were selected, up from five when the program was launched.

RETURN TO WORK

Return to Work offers women (and men), who have taken career breaks an opportunity to return to the workforce through a formal paid internship program. Participants are generally away from the workforce for a minimum of two years, but some have been away for more than 15 years. Over 300 women and men have successfully completed the program since 2014 and over 60% of participants globally have been hired.

ALLIANCE FOR CHILDREN'S MENTAL HEALTH

The Alliance, which brings together key leaders in the children's mental health space, will combine the resources and reach of Morgan Stanley and its Foundation with the knowledge and experience of its distinguished nonprofit partner organizations. It will help drive capital toward scaling effective, evidence-based strategies, impacting the mental health of youth. The Alliance will help strategically address children's mental health concerns and the far-reaching challenges of stress, anxiety and depression.

END NOTES

THIS LETTER MAY CONTAIN FORWARD-LOOKING STATEMENTS INCLUDING THE ATTAINMENT OF CERTAIN FINANCIAL AND OTHER TARGETS, OBJECTIVES AND GOALS. ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE EXPRESSED OR ANTICIPATED IN THESE FORWARD-LOOKING STATEMENTS. MORGAN STANLEY DOES NOT UNDERTAKE TO UPDATE THE FORWARD-LOOKING STATEMENTS TO REFLECT THE IMPACT OF CIRCUMSTANCES OR EVENTS THAT MAY ARISE AFTER THE DATE OF SUCH FORWARD-LOOKING STATEMENTS. FOR A DISCUSSION OF RISKS AND UNCERTAINTIES THAT MAY AFFECT FUTURE RESULTS, PLEASE SEE MORGAN STANLEY'S ANNUAL REPORT ON FORM 10-K, QUARTERLY REPORTS ON FORM 10-Q AND CURRENT REPORTS ON FORM 8-K, INCLUDING ANY AMENDMENTS THERETO.

INFORMATION PROVIDED WITHIN THIS LETTER MAY INCLUDE CERTAIN NON-GAAP FINANCIAL MEASURES. THE DEFINITION OF SUCH FINANCIAL MEASURES AND/OR THE RECONCILIATION OF SUCH MEASURES TO THE COMPARABLE GAAP FIGURES IS INCLUDED IN EITHER THE ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019 OR HEREIN.

- 1 DURABLE SOURCES OF REVENUE REPRESENT REVENUES ASSOCIATED WITH FEE-BASED PRICING ARRANGEMENTS, FINANCING AND LENDING THAT ARE GENERALLY LESS SUSCEPTIBLE TO SIGNIFICANT FLUCTUATION AS A RESULT OF MARKET VOLATILITY WHEN COMPARED TO OTHER FIRM REVENUES, AND ARE COMPRISED OF: ASSET MANAGEMENT REVENUES IN THE WEALTH AND INVESTMENT MANAGEMENT SEGMENTS; REVENUES FROM FINANCING AND SECURED LENDING ACTIVITIES IN THE INSTITUTIONAL SECURITIES AND WEALTH MANAGEMENT SEGMENTS; AND REVENUES FROM INVESTMENT BANKING ADVISORY SERVICES.
- 2 PRE-TAX PROFIT REPRESENTS INCOME FROM CONTINUING OPERATIONS BEFORE INCOME TAXES.
- 3 NET INCOME REPRESENTS NET INCOME APPLICABLE TO MORGAN STANLEY.
- 4 NON-GAAP FINANCIAL MEASURE; RETURN ON AVERAGE TANGIBLE EQUITY REPRESENTS NET INCOME APPLICABLE TO MORGAN STANLEY, EXCLUDING INTERMITTENT DISCRETE TAX ITEMS, LESS PREFERRED DIVIDENDS AS A PERCENTAGE OF AVERAGE TANGIBLE COMMON EQUITY ("TCE"). TCE EQUALS COMMON EQUITY LESS GOODWILL AND NET INTANGIBLE ASSETS.
- 5 PRE-TAX MARGIN REPRESENTS PRE-TAX PROFIT AS A PERCENTAGE OF NET REVENUES.
- 6 BALANCE SHEET LIGHT REFERS TO A LOWER LEVEL OF RISK WEIGHTED ASSETS INTENSITY
- 7 EQUITY SALES & TRADING REVENUE WALLET SHARE IS BASED ON THE REPORTED 2019 NET REVENUES FOR THE EQUITY SALES AND TRADING BUSINESSES OF MORGAN STANLEY AND THE FOLLOWING GLOBAL PEER COMPANIES: GOLDMAN SACHS, JP MORGAN CHASE, BANK OF AMERICA, CITIGROUP, BARCLAYS, UBS GROUP, DEUTSCHE BANK, AND CREDIT SUISSE.
- 8 EXPENSE EFFICIENCY RATIO REPRESENTS TOTAL NON-INTEREST EXPENSES AS A PERCENTAGE OF NET REVENUES.
- 9 SOURCE: THOMSON REUTERS AS OF JANUARY 16, 2020
- 10 SOURCE: CERULLI ASSOCIATES 4Q 2019, ISSUE #74
- 11 INCLUDES LONG-TERM INVESTMENT MANAGEMENT FUNDS DOMICILED IN THE U.S., U.K., LUXEMBOURG AND JAPAN AS OF DECEMBER 31, 2019 THAT HAVE A RATING BASED ON THE OLDEST SHARE CLASS FOR EACH FUND
- 12 U.S. BANK SUBSIDIARIES REPRESENT MORGAN STANLEY BANK, N.A. AND MORGAN STANLEY PRIVATE BANK, NATIONAL ASSOCIATION
- 13 ACTIVE EQUITY NET INFLOWS PERCENTAGE REPRESENTS NET FLOWS MEASURED IN BILLIONS OF U.S. DOLLARS AS A PERCENTAGE OF BEGINNING OF PERIOD ASSETS UNDER MANAGEMENT (AUM) FOR THE PERIOD JANUARY 1, 2017—DECEMBER 31, 2019. METRIC REPRESENTS A COMPARATIVE AGAINST PEERS. PEERS INCLUDED ARE BASED ON U.S. PUBLICLY TRADED ASSET MANAGERS WITH ACTIVE EQUITY AUM GREATER THAN \$100 BILLION AS OF DECEMBER 31, 2019: AFFILIATED MANAGERS GROUP, ALLIANCE BERNSTEIN, ARTISAN PARTNERS, BLACKROCK (ACTIVE EQUITIES FLOWS), BRIGHTSPHERE, FRANKLIN RESOURCES, INVESCO (ACTIVE EQUITIES FLOWS), JANUS HENDERSON, LEGG MASON, T. ROWE PRICE OR AS OF OCTOBER 31, 2019 FOR EATON VANCE
- 14 REPRESENTS LONG-TERM ASSETS UNDER MANAGEMENT (EXCLUDING LIQUIDITY ASSETS) AS OF DECEMBER 31, 2019.
- 15 CAPITAL RETURN REPRESENTS ACTUAL SHARE REPURCHASES AND DIVIDENDS DISTRIBUTED DURING THE YEAR, REPRESENTING A BLEND OF TWO SEQUENTIAL CCAR CYCLES