

The Henry Fund

Henry B. Tippie School of Management

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Automated Data Processing (ADP)

Information Technology – Payroll & HCM

March 7, 2018

Investment Thesis

Automated Data Processing (ADP) is a leader in the payroll and human capital management industry and is well positioned for the future. While we forecast steady 4.25% revenue growth for the core service offerings, we expect net earnings to experience double-digit growth in FY2018 due to rising interest rates and strong growth in the Professional Employer Organization (PEO) segment. Our growth expectations for interest revenue and in the Professional Employer Organization is more optimistic than the current analyst consensus. This strong bottom-line growth and 18.6% upside have driven our buy rating.

Drivers of Thesis

- ADP invests money withheld from paychecks in short-term, low risk, investments. This interest income has no variable cost for ADP, and is expected to double in the next two years as the Fed continues to raise interest rates.
- ADP's Professional Employer Organization segment earns \$916 in net earnings per client employee compared to \$75 in their Employer Services Segment. We are forecasting this higher impact segment to grow at 12% in FY2018, and 10.5% in FY2019.
- ADP has a strong inflow of recurring revenue from their subscription based service. They enter into 2-7 year contracts with their larger clients and are not dependent on a single client for more than 2% of total revenue.

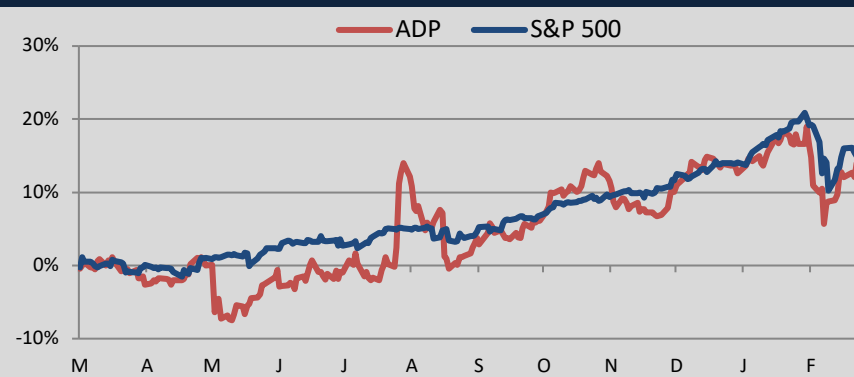
Risks to Thesis

- ADP attracts new business by solving compliance and Human Resource headaches. The Trump Administration has been vocal about repealing regulation, including repealing the Affordable Care Act which was a boon to ADP's business when passed. Significant deregulation, if passed, would likely slow new business bookings for ADP.
- ADP handles an enormous amount of sensitive data and would be financially burdened by increased data protection laws, and their reputation hurt by a data breach.

Earnings Estimates

Year	2015	2016	2017	2018E	2019E	2020E
EPS	\$3.07	\$3.27	\$4.36	\$4.36	\$5.15	\$5.76
growth	(3.2%)	6.5%	12.5%	17.9%	18.3%	11.9%

12 Month Performance



Stock Rating

Buy

Target Price

\$125-135

Henry Fund DCF	\$126
Henry Fund DDM	\$138
Relative Multiple	\$126

Price Data

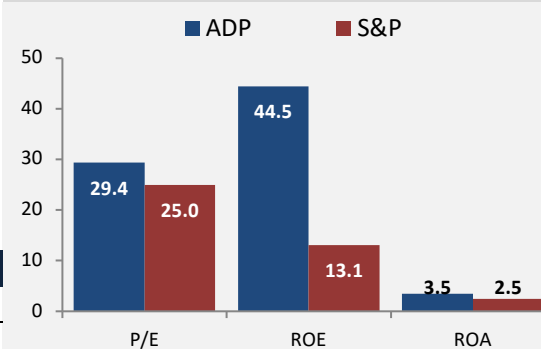
Current Price	\$113.79
52wk Range	\$95.50 – 125.24
Consensus 1yr Target	\$127

Key Statistics

Market Cap (B)	\$50.44
Shares Outstanding (M)	443
Institutional Ownership	79.50%
Five Year Beta	0.86
Dividend Yield	2.21%
Est. 5yr Growth	71.83%
Price/Earnings (TTM)	29.4
Price/Earnings (FY1)	23.71
Price/Sales (TTM)	3.94
Price/Book (mrq)	12.81

Profitability

Operating Margin	18.63%
Profit Margin	13.47%
Return on Assets (TTM)	3.52%
Return on Equity (TTM)	44.48%



Source: Yahoo Finance

Company Description

Automated Data Processing is one of the largest payroll and human capital management companies in the world, paying 1 in 6 working Americans. ADP offers services such as hiring, benefits, payroll, tax, insurance, retirement, compliance, and other HR services so their clients can focus on their core business. Founded in 1949, Automated Data Processing has always been an innovator in the business services space, and was one of the first companies to adopt a software as a service model.

EXECUTIVE SUMMARY

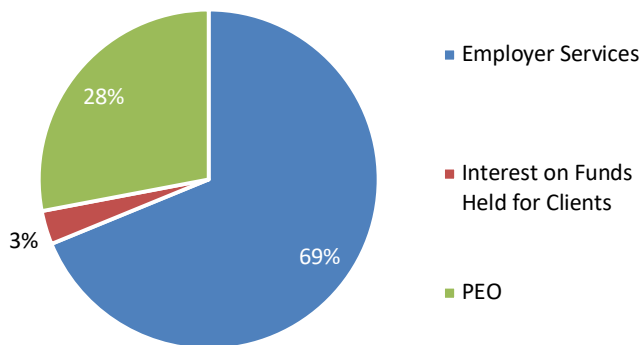
ADP is the founder and leader of the payroll and human capital management industry, paying one in six working Americans. ADP is a trusted, and in many cases integral, partner to almost 700,000 businesses. Since its founding, ADP has always place a high value on innovation and service. As pioneers of the software as a service (SaaS) movement, ADP has built a highly scalable business of nearly 100% recurring revenue.

We are forecasting revenue CAGR of 6.33% and a net earnings CAGR of 10.02% from 2018-2022. This growth is driven primarily by increased income from interest on Funds Held for Clients, due to raising interest rates and projected double-digit growth to their Professional Employer Organizations segment. Those two factors are the key drivers of our DCF model. With a long history of a steady dividend, we believe the Dividend Discount Model to be an appropriate model, and have set a target price of \$135-\$145, representing an upside of 27% as of March 1, 2018.

COMPANY DESCRIPTION

Automated Data Processing (ADP) is a payroll processing and human capital management (HCM) company. ADP offers services for hiring, benefits, payroll, tax, insurance, retirement, compliance, and other HR solutions so their clients can focus on their core business. ADP separates their revenue into three categories; Employer Services, Professional Employer Organizations (PEOs), and Interest on Funds Held for Clients.

2017 Revenue Decomposition

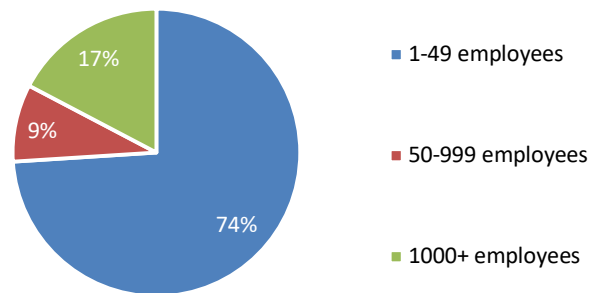


Source: ADP 10-K

Employer Services

In 2017, Employer Services made up almost 70% of revenue for ADP, and is their oldest business segment. ADP started as a pure payroll company that added additional services such as benefits, compliance, retirement planning, and hiring, as they grew. All these services that ADP offers to their clients fall under the umbrella of Employer Services. ADP offers nine different software as a service (SaaS) products that are targeted at different business types based on size, level of help need, and required services. In 2017, ADP had over 570,000 clients on these SaaS platforms, and pays roughly 26 million workers in the United States and an additional 13 million workers internationally. No single client accounted for more than 2% of ADP's revenues in 2017, and they enjoy an average client retention of 10 years in the Employer Services segment.

Client Breakdown by Size



Source: ADP 10-K

Employer Services has clients ranging from having only one employee all the way up to large companies with tens of thousands of employees. The "US Client Breakdown by Size" chart shows that the vast majority of ADP's clients are small business with less than 50 employees.

ADP's ability to serve large clients gives them an advantage over most of their competitors. While larger clients have more buying power, they are also more willing to enter into longer-term contractual agreements and provide ADP a vast amount of data.

We forecast that Employer Services revenues will grow at 4.25% in 2018 and beyond. This is a relatively mature segment that has experienced steady growth for the last 5 years. Margins for this segment are expected to decrease by 50 basis points to 29.6% in the short term from the

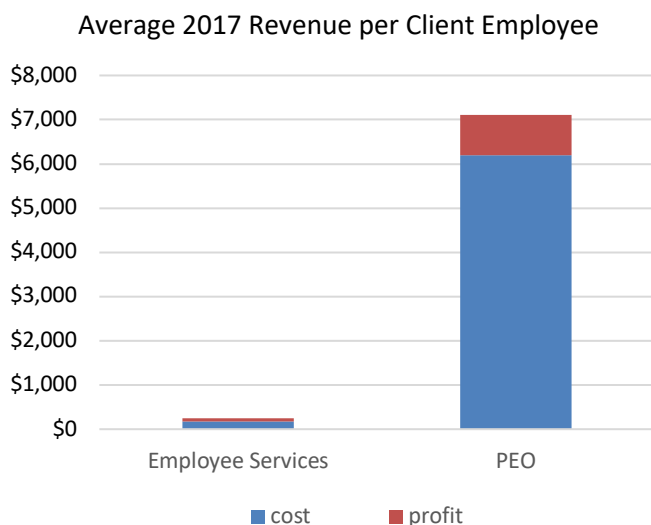
financial pressure of two recent acquisitions, but rebound in FY 2019.

Continuous investments to improve current products and increase service offerings through innovation and acquisitions are expected to continue in the Employer Services segment.

Professional Employer Organizations (PEO)

PEOs are a service where a Human Capital Management (HCM) company, such as ADP, co-employs their client’s employees. This structure gives the HCM company full legal authority to make decisions regarding payroll, benefits, and other services. ADP’s PEO platform is called TotalSource which made up around 28% of revenues for ADP in 2017. TotalSource is primarily sold as a compliance-oriented service because the high level of involvement allows ADP’s clients to focus even more fully on their day-to-day operations, knowing that ADP is taking care of all the necessary HR and compliance requirements for a business to operate. Roughly 1% of the US workforce is employed by a PEO [1]. In 2017, TotalSource was the largest PEO in the world and served over 10,700 clients with a combined 498,000 employees. TotalSource has an average client retention rate of 7 years.

TotalSource’s margin is 12.6%, which has been trending upward over the last few years. Comparing this to Employer Service’s margin of 29.6% can be misleading, because while ADP’s PEO margin is less than half of their Employer Services, every PEO client employee generates 29x more revenue than an Employer Services client employee.

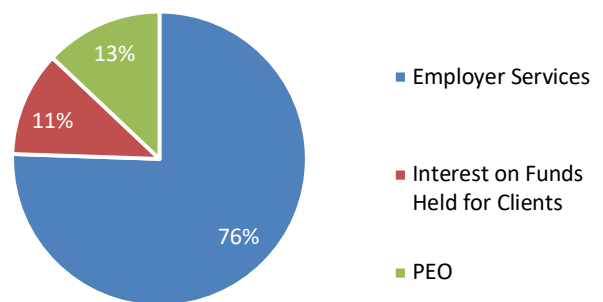


Source: ADP 10-K

Interest on Funds Held for Clients

Every dollar that is withheld from a paycheck for taxes, Social Security, Medicare, or any other reason is temporarily held by ADP before being passed along to the IRS or appropriate agency. While ADP has custody of these funds they earn interest through short-term financial arrangements. In some cases, ADP will invest in securities up to five years from maturity and use the daily collection of client funds to satisfy other client fund obligations. They have strict standards for what quality securities they are allowed to invest in, including AAA for asset-backed securities and A for municipal bonds. In order to ensure liquidity to meet client fund obligations, they maintain a strong cash balance and have available borrowings of \$9.5B in their commercial paper program [2].

2017 Net Earnings Breakdown



Source: ADP 10-K

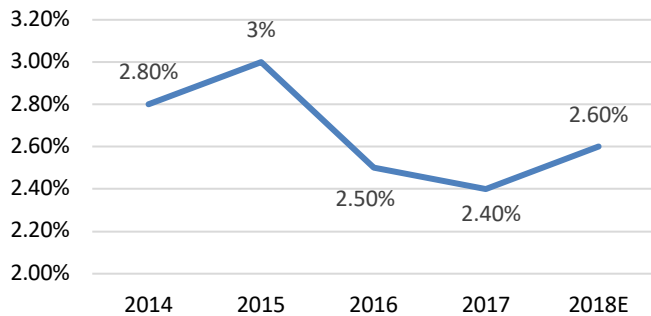
Following the Federal Reserve’s guidance, we expect the federal funds rate to rise to 2% in 2018, 2.5% in 2019, and 3% in 2020. We have forecasted rates remaining constant at 3% beyond 2020. We are anticipating that these rate hikes will increase the percentage of ADP’s revenue coming from Interest from Client Funds from 3% to 6.5% by 2020. The benefit from rising interest rates is partially offset by the rising cost of capital, and more expensive future acquisitions, but has a strong impact on ADP’s bottom line.

Pays per Control

ADP grows through new business bookings, acquisitions, and pays per control growth. Pays per control is a metric of how many employees ADP’s clients have. If one of ADP’s client’s workforce grows by 10%, then the variable fees they pay to ADP grow in step. This is a very inexpensive form of growth for ADP, but is largely outside their control.

The strongest driver of Pays per Control growth is the overall US job market. With unemployment being at an all-time low, ADP has enjoyed steady 2.5-3% growth from increased workers and pressure to raise wages.

Pays per Control Growth



Source: ADP 10-K and HF estimates

Management guidance suggests that pays per control will grow at 2.6% in 2018. We forecast that pays per control will remain between 2.6% and 2.8% beyond 2018.

Cost Structure

In 2017 59% of ADP’s total expenses were operating expenses, which includes all costs associated with managing client’s accounts. We forecast this to increase from 51.8% of revenues to 53% of revenues in FY2018 before dropping back down to 52%. This spike is based on management’s expectation of short-term costs associated with the integration of new services gained through two FY2017 acquisitions.

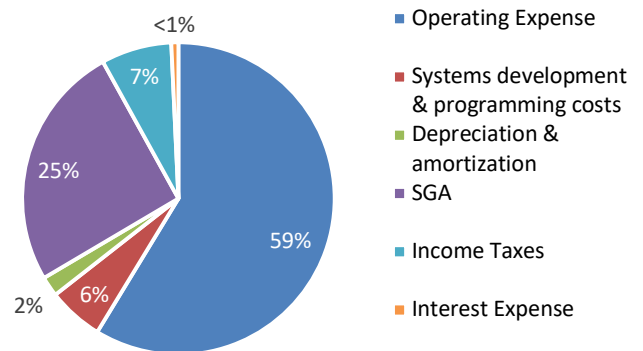
ADP spent \$628M on developing new software, which accounted for roughly 6% of total cost. This number has grown sporadically over the past five years, sometimes as much as 11% and as little as 1%. Management does not provide any guidance, however we forecast systems development and programming costs to grow at 6.5% annually.

In December 2017, the Trump administration passed the Tax Cuts and Jobs Act which lowered the corporate tax from 35% to 21%. ADP received a \$46 million one-time tax benefit, and management expects their effective tax rate will drop from 31.5 to 25.5%. ADP has not been a cash constrained business for decades, so we do not expect this influx in cash to be reinvested into business operating, but instead redistributed to shareholders through share buybacks and potentially a dividend increase. Over the last 5 years, ADP has bought back between \$647 million and

\$1.5 billion in stock each year, and we have forecasted they will continue to buy back between \$790 million and \$1.3 billion a year over the next five years to keep cash at a reasonable level. In addition to stock repurchases, we have forecasted 7-12% dividend growth in dividends per share.

Notably, less than 1% of ADP’s expenses is servicing debt. ADP has historically had very little debt. In 2015 they had only \$9M in debt but issued a \$2B 10-year bond in 2016 to repurchase stock [3]. ADP is one of the few companies to have ever had a AAA bond rating but was downgraded to AA in 2014 when they spun off their dealer services business, which accounted for 15% of revenue at the time [4].

2017 Expense Breakdown

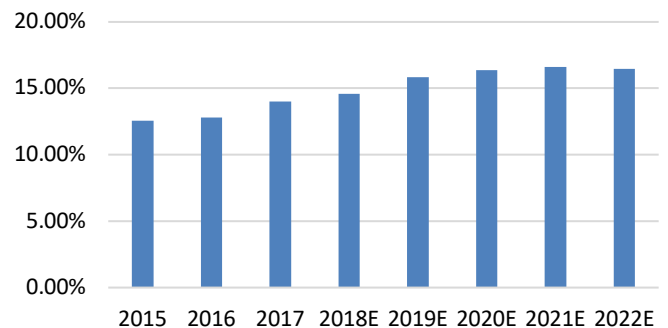


Source: ADP 10-K

Profit Margin

While expenses are generally growing in step with Employer Services and PEO revenue, interest from Funds Held for Clients is growing with no variable cost. This is the key driver of why we are forecasting profit margins to rise from 2018-2021.

Projected Profit Margin



Source: ADP 10-K

Additional Merits

ADP DataCloud: ADP pays roughly 39 million people each month and is one of the only Human Capital Management companies to serve small, mid-sized, large, and multi-national companies. This gives them an enormous amount of unique information. ADP offers clients access to their DataCloud on a number of their service platforms, allowing clients to benchmark against peers and recognize workforce trends. This is a service that no other company in the world can offer like ADP.

ADP DataCloud powers the ADP Research Institute, a branch of their company that publishes data-driven reports on the working world [5]. These reports are seen as highly credible and increase ADP's brand strength and recognition.

Compliance DNA: For years ADP has reacted quickly to changes in regulation and compliance for the HR industry. This reputation gives clients peace of mind and drives new business. Avoiding the headaches of remaining compliant in a dynamic regulatory environment is a key driver of new business bookings for the Payroll & HCM industry. The industry saw a spike in new business booking when companies began offering new services that ensured employer's compliance with the "Employer Shared Responsibility" portion of the Affordable Care Act (ACA).

Knowing this, changes in regulation are both a boon for business and a large liability for ADP. Failing to help their clients comply with new requirements would be costly to both their bottom line and reputation.

High switching cost: There is a high non-monetary cost to switching Payroll & HCM providers. Companies do not want to disrupt workflow by changing back-office practices if they are working. This makes it difficult to steal clients from competitors but it also makes it difficult for competitors to steal your clients. As the clear leader in terms of market size, ADP benefits from these sticky relationships. In FY2017 they had a 90%, down from 90.5% in FY2016 while competitors boast about smaller numbers, such as Insperity's 85% retention.

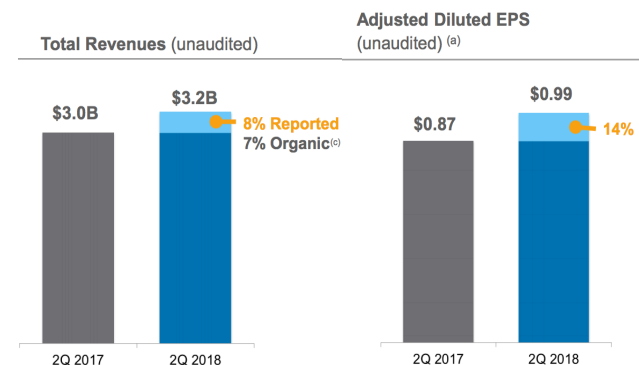
Data Protection DNA: ADP has sensitive personal information for hundreds of millions of people worldwide that it must protect. In February 2018, ADP received approval from the European Union to implement Binding Corporate Rules (BCRs) as a data processor and controller. This approval has been given to only a few companies

worldwide, and allows them to transfer personal data across country borders throughout Europe. The approval is only given to companies that the European Union's 28 Data Protection Authorities believe have systems in place to appropriately protect personal data. This approval both allows ADP to conduct business in Europe more and is a nice feather in their cap.

RECENT DEVELOPMENTS

Quarter 2 Earnings (2018)

ADP released its Q2 (Sept-Dec) on January 31, 2018 and their stock saw a one-day 3% spike as they beat consensus EPS by \$0.07. Their worldwide new business bookings were up an impressive 6%, EPS up 14%, and revenue up 8%, but their margins were down 25-75 basis points across their services [6]. This is reflective of an increasingly competitive marketplace, and a few onetime costs associated with the integration of two new acquisitions.



Source: ADP 10-Q

Notably, their PEO segment was up 15% compared to the year before, but their margin declined 30 basis points. This remaining a high margin and high growth segment for the coming years is an important part of our valuation.

The average yield on Funds Held for Clients was 1.8%, up 10 basis points. This increase reflects the rise in the federal funds rate, and its continued increase is an important revenue driver in our model. Management said they now expected the Funds Held for Clients to rise \$55-65 Million in FY2018, up from \$45-55. This hike reflects both average fund balance and rising rates.

Management discussed projections for the future, which we have considered when making our forecasts, and talked about the recently passed Tax Cuts and Jobs Act. ADP recognized a onetime net tax benefit of \$46 million from this law.

Acquisitions

WorkMarket: In January 2018, ADP announced the acquisition of WorkMarket, a cloud-based workforce management solution provider. WorkMarket raised \$25M at a \$72M valuation in April of 2017, but ADP has not announced the exact price they paid. WorkMarket specializes in helping companies find, hire, manage, and compensate freelance workers [7]. This move further solidifies ADP's position as an industry leader that wants to be capable of serving every business, and be able to solve any human problem that business may have. By adding WorkMarket to their arsenal ADP is able to better serve the roughly 80% of companies that utilize independent contractors by offering one platform that can manage all their employees, regardless of work type.

Global Cash Card: In October 2017, ADP announced the acquisition of Global Cash Card, which they paid \$460M for in cash. Global Cash Card is a digital payment platform that allows employers to pay employees by loading their paycheck onto a credit card. This generally used to pay contract workers, issue a travel per diem, or as an incentive card.

The Marcus Buckingham Company: In January 2017, ADP acquired The Marcus Buckingham Company, which specializes in employee engagement consulting and management consulting. Terms of this acquisitions were kept private.

This acquisition shows ADP's desire to horizontally integrate into new Human Resource markets and move from being a service provider into a trusted business partner.

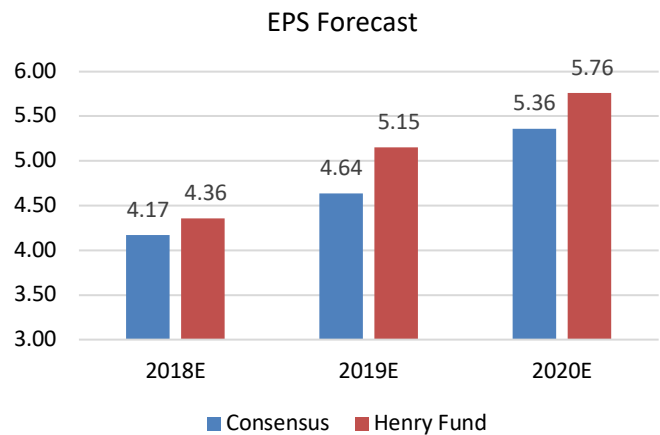
Tax Cuts and Jobs Act

Late 2017, the GOP and President Donald Trump passed a bill that made significant changes to the US tax code. Most notably were the changes to the corporate tax rate, dropping it from 35% to 21%, and the altering of individual tax brackets. Some changes to acceptable deductions and withholdings take effect immediately, while others will be rolled out over the next 7 years [8]. ADP received a \$46 million onetime tax benefit from the reversal of deferred taxes, and management expects their effective tax rate will drop from 31.5 to 25.5%. Management did not discuss any repatriation of cash held overseas.

Historically, ADP has seen an increase in demand following regulatory changes, however management is unclear whether this will hold true. [9] Generally speaking, changes to the tax code have created more complexity and companies come to ADP to unload the burden of understand and implementing the necessary changes. The tax bill passed in December 2017 did not add complexity, it simply made changes. Due to the uncertainty of whether this bill will drive any new business, we have forecasted no additional demand from this event.

Future Projections

Below you can see our EPS forecast next to the consensus EPS forecast. Our forecast is higher because we anticipate stronger bottom line growth from increases in both the Interest on Funds Held for Clients and PEO segments, and the other analysts have not updated their EPS targets since ADP's strong Q2 earnings release.



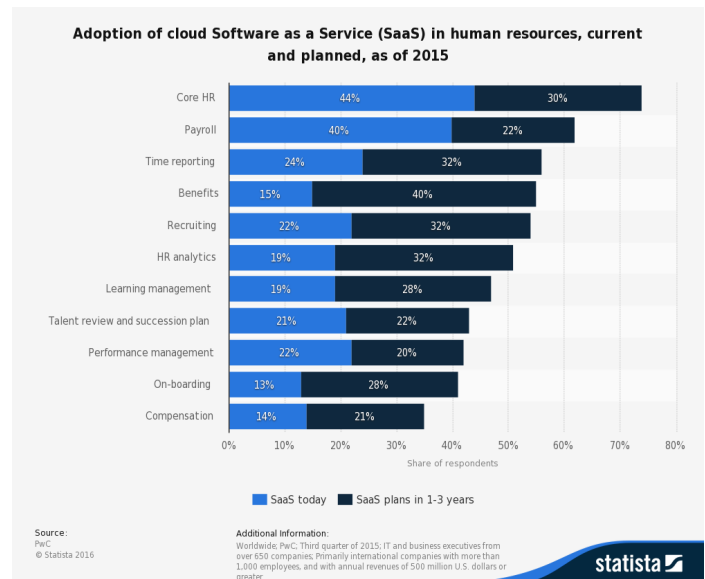
Source: Nasdaq.com and HF estimates

We believe the PEO segment will continue to grow at 9-12% over the next 3 years, and they will experience strong earnings growth from rising interest rates. As described in the Company Description section, growth in the Interest on Funds Held for Clients segment and PEO new business bookings disproportionately raise earnings compared to the Employer Services segment. This is because there is no variable cost associated with revenue from Interest on Funds held for clients and the increased revenue per PEO client outweighs the lower profit margin.

INDUSTRY TRENDS

Software as a Service (SaaS)

The cloud and SaaS has revolutionized the Payroll and HCM industry. While ADP attempted to roll out a SaaS payroll system in the late 1990s, the world was not ready. It wasn't until the mid-2000s, driven in part by the entry of Workday and Intuit, that SaaS payroll systems really took off. In 2009, ADP launched a mobile app for their payroll product RUN that is now used by 12 million people in 27 languages. The chart below shows that SaaS was already a huge part of the Payroll & HCM industry in 2015, and was expected to grow significantly in every category.



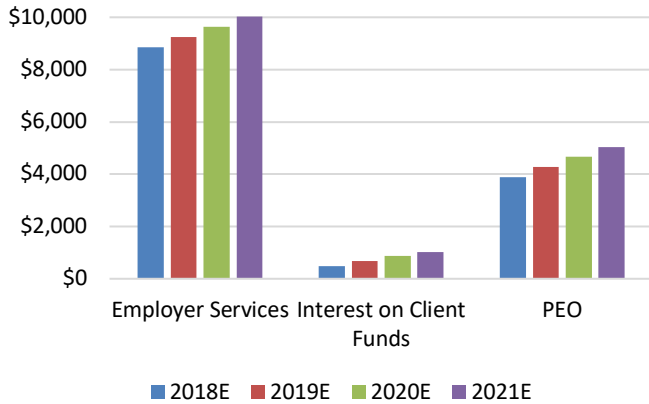
Source: Statista

To be competitive in this industry, one must have a strong software platform where companies can manage their employee's hours, payroll, benefits, track metrics, and have immediate access to friendly customer service 24 hours a day. Increasingly, it is also important to have a mobile application that is user friendly for both the client and their employees.

Acquisitions

New entrants are common in the payroll and human capital management industry. Companies such as Greenhouse, Namely, and Zenefits, have successfully raised about \$800 million to tackle the issues of recruiting, and HR for small to mid-sized companies. Startups in this space generally have a niche industry or geographic specialty. Larger companies continue to make acquisitions

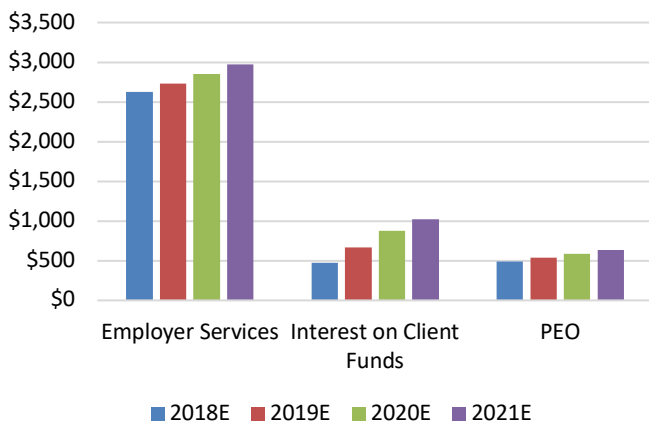
Expected Revenues



Source: ADP 10-K and HF estimates

While revenues from Interest on Client Funds appears insignificant compared to Employer services, almost 100% of it is profit while only 29.6% of Employer Services revenue and 12.6% of PEO revenue are profit. We expect both of those margins to fluctuate 50-75 basis points over the next couple years in reaction to the financial pressure of integrating acquired companies before leveling off. The chart below shows that we expect the Interest on Client Funds to be more profitable than their PEO segment in the coming years, due to rising interest rates.

Expected Earnings



Source: ADP 10-K and HF estimates

We have forecasted a CAGR of 4.2% for Employer Services, a CAGR of 22.26% for Interest on Client Funds, and a CAGR of 8.77% on PEO from 2017-2022. That creates a total revenue CAGR of 6.33%.

both to increase their service offerings and reduce competition.

ADP

- Jan 2018 – WorkMarket (~\$72M): SaaS HCM for freelance employees
- Oct 2017 – Global Cash Card (\$460M): Digital payment including paycards
- Jan 2017 – The Marcus Buckingham Company (undisclosed price): Employee engagement/management consulting

Paychex

- Aug 2017 – HR Outsourcing Holding Inc (undisclosed price): PEO provider in the South East United States
- Sept 2017 – Experity (undisclosed price): Richmond, VA payroll provider

TriNet Group

- April 2016 – Teleboarder (undisclosed price): SaaS HCM for international employees

Intuit

- December 2017 – Tsheetz (\$340M): Employee time tracking software
- October 2017 – Exactor (undisclosed price): Sales tax compliance and record keeping

Workday

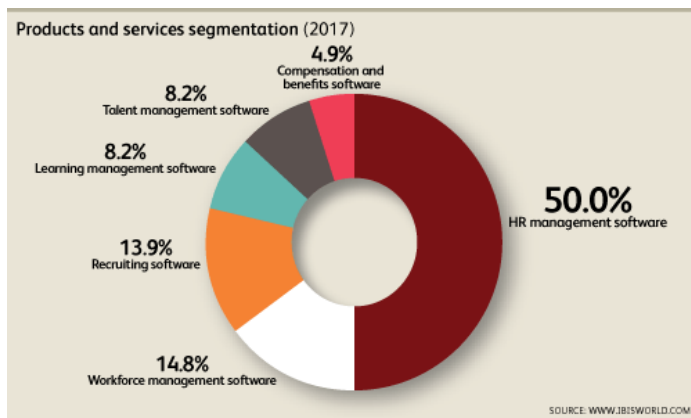
- January 2018 – SkipFlag (undisclosed price): Uses artificial intelligence to organize an enterprise’s information
- July 2017 – Pattern (undisclosed price): Intelligent workspace for sales teams
- July 2016 – Platforna (undisclosed price): Helps businesses analyze big data to become more data-driven.

Source: crunchbase.com

These are only the acquisitions since 2016, and they show the fierce competition in the payroll industry as companies fight to grow their market share as well as their service portfolios.

Looking at the recent acquisitions, there is a trend toward SaaS and tech companies. Payroll companies are investing heavily in the future as they see opportunities for technological advantage and increased profitability. We expect this trend to continue.

Services Segmentation - Industry



Source: IBISWorld

In 2016, HR Management software made up 58% of industry revenue, but as other services have grown that percentage has decreased to 50%. The largest change from 2016 to 2017 was in recruiting software, which increased from only 6.6% of the industry’s revenue in 2016 to 13.9% in 2017. The growth of segments other than payroll is not surprising as large companies, like ADP, have focused on growing their service offerings since they were founded.

MARKETS AND COMPETITION

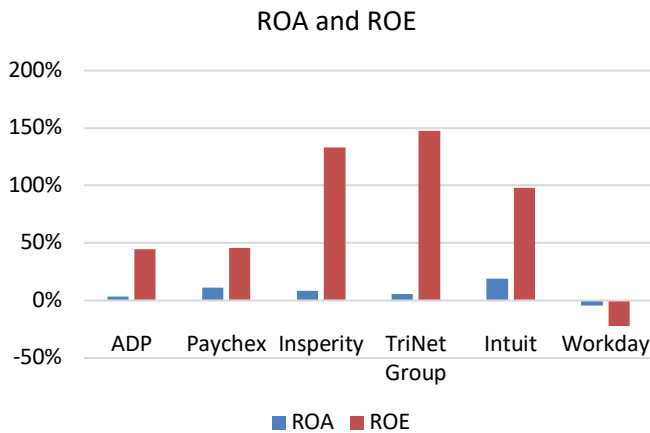
Peer Comparisons

The Payroll and HCM industry’s profitability has attracted a lot of competition, both public and private. Gusto, Patriot Software, Justworks, Zenefits, Greenhouse, and Namely are all reputable, private, companies in this space. While most of them have similar service offerings and operations to ADP, Zenefits has focused on creating a mobile app that integrates with companies, such as Google and Slack, and has transparent service pricing. This model makes them attractive to small companies, and, apparently, investors. They were valued at \$4.5B after just two years, but their latest round valued them at just \$2B.

	Market Cap	Sales	Profit Margin
ADP	\$ 50,360	\$ 12,380	13.47%
Paychex	\$ 22,910	\$ 3,151	27.22%
Insperity	\$ 2,790	\$ 3,300	2.56%
TriNet Group	\$ 3,260	\$ 3,275	5.43%
Intuit	\$ 43,240	\$ 5,177	17.48%
Workday	\$ 27,570	\$ 2,143	-14.99%

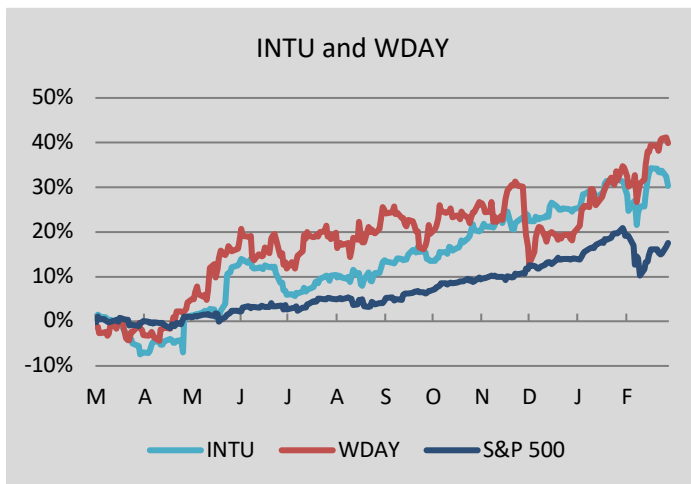
Source: Yahoo Finance

There is significant variability in these companies ROA and ROE that reflect the different service priorities. ADP and Paychex, who focus primarily on Employer Services have a lower ROE, while Insperity and TriNet Group focus primarily on their PEO service, which lends itself to a higher ROE because of the higher earnings per client employee.



Source: Yahoo Finance

Of these publically traded companies, Intuit and Workday have different underlying business models or strategies which make them difficult to compare to ADP.



Source: Yahoo Finance

Intuit

Intuit has two flagship products, TurboTax and QuickBooks, with payroll being a feature of the QuickBooks accounting software [10].

Intuit's business model is fundamentally different from ADP's. Intuit is not in the Human Capital Management space, but backed into the payroll industry through

QuickBooks. QuickBooks' growth among small businesses has earned Intuit a sizeable portion of the payroll industry. We cannot ignore Intuit's presence in the industry, but their foundational differences make them a substitute not a direct competitor of ADP.

We do not see Intuit as a large threat to ADP because they cannot offer the all-in-one HR service that attracts most of ADP's customers. QuickBooks is a great accounting software for small businesses, but as companies grow and ADP is better suited to handle their more complex payroll needs.

Workday

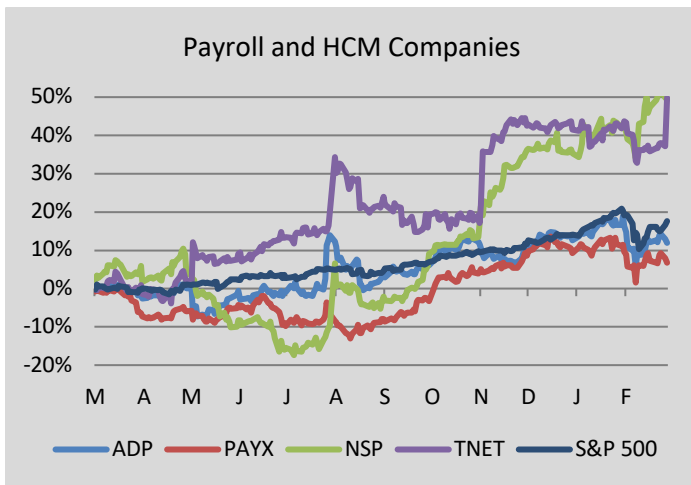
Workday's strategy for growth and high levels of debt make it difficult to compare to other companies in this industry. Workday is unprofitable and not yet cash flow positive [11]. They focus on mid-sized to large companies and offer both corporate financial management and human resource software. Workday is building up a strong portfolio of high profile repeat customers, but their financials are cause for concern.

We do see Workday as a threat to ADP because they are targeting large corporations. Historically, the only compelling HR options a large company had were to keep everything in-house or outsource to ADP. Workday is providing a compelling alternative, and companies like Johnson & Johnson, Visa, Toyota, and Sony have hired Workday. They focus primarily on the HCM side, and actually outsource their payroll service to other companies, including ADP [12]. Workday has an open API that makes it easy for large companies to use their own programmers to create a custom corporate finance & HR system, built on Workday's platform.

While they are not a payroll company, Workday is ADP's most direct competitor for Human Capital Management in large firms.

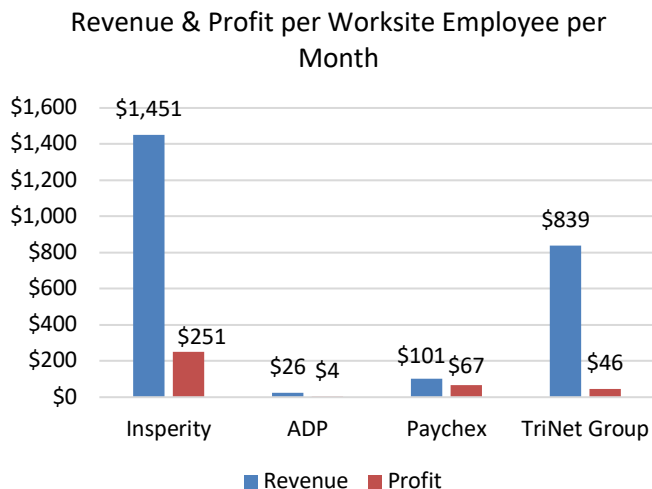
Pure Payroll HCM companies

Insperity, Paychex, and TriNet Group have business model's and service offerings more closely aligned with ADP.



Source: Yahoo Finance

Despite having similar service offerings, a couple key metrics have high variability across these four firms; the amount of revenue and the amount of profit per employee.



Source: Insperity 10-K, ADP 10-K, Paychex 10-K, TriNet Group 10-K

On its face, seeing that ADP earns only \$4 per worksite employee per month when Insperity makes \$251 is concerning. However, there are two key reasons for this. The first is proportion of revenue coming from Employer Services compared to the higher revenue per worksite employee PEO segment. The second is size of clients served, because larger clients spread the fixed fee collected by a Payroll/HCM company across many more employees.

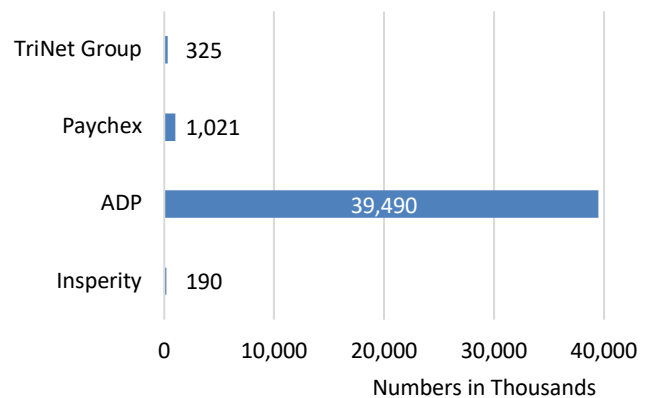
Insperity and TriNet Group were founded as pure PEO providers, which significantly raises their per employee financial numbers. While the market for PEOs is significantly smaller, both the revenue and profit per worksite employee is much higher. Since their founding,

both Insperity and TriNet Group have expanded their service offerings to include Employer Services.

Paychex does not distinguish between their employer services and PEO service with regards to revenue or worksite employees. Based on their revenue per worksite employee, we can infer that their Employer Services segment is significantly larger than their PEO segment.

In terms of worksite employees served, the other traditional Payroll & HCM companies significantly lag behind ADP. This is due in part to their focus on small to mid-sized companies, while ADP serves small, mid-sized, large, and multinational companies.

2017 Number of Worksite Employees



Source: Insperity 10-K, ADP 10-K, Paychex 10-K, TriNet Group 10-K

ADP's competitors also generate revenue by investing client held funds but is much less significant portion of revenue because they process far fewer paychecks. The sheer number of paychecks processed gives ADP a distinct advantage in this area.

Paychex

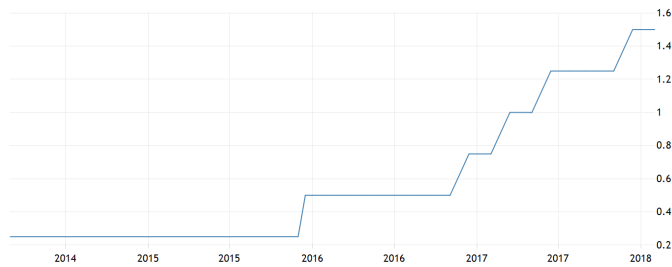
Paychex is probably the closest public competitor to ADP in terms of product offerings. Paychex focuses on small to mid-sized companies and carries no debt. This aversion to debt served them well during the Great Recession.

In some ways, being so similar to ADP in terms of structure and strategy makes them less of a threat to ADP. While other companies have a niche where they may be better than ADP, Paychex is similar in many ways but holds a much smaller share of the market.

ECONOMIC OUTLOOK

Rising Interest Rates

Under Janet Yellen the Federal Reserve raised interest rates 3 times to 1.5%, and it is expected that the Fed will continue to raise rates under Jay Powell [13]. We have forecasted that the federal funds rate will rise to 3% by 2021. This good news for the payroll and human capital management industry that earns revenue on short-term securities purchased with money collected to pay taxes, before they payout to the IRS. With higher interest rates, those investments could become a more significant part of their revenue.



Source: tradingeconomics.com

Unemployment

The Payroll & HCM industry, more than most, benefits from high employment rates and job growth. As their client's workforce grows, so does the revenue payroll companies collect from the per-employee fees charged to their clients. ADP attributed their 13% PEO growth primarily to the increase in average number of worksite employees, driven in part by growth of their existing clients.

The following graph shows the strong correlation between Payroll & HCM industry revenue and employment growth.



Source: IBISworld.com

CATALYSTS FOR GROWTH

- The Fed raising interest rates will be an important source of net earnings growth for ADP. While a new business booking brings additional variable costs with the new revenue, higher interest rates to invest client funds has no variable cost for ADP.
- Regulatory changes historically have led to a spike in new business bookings, as companies look to shed the responsibility of remaining compliant.
- Growth in their PEO segment has a disproportionate effect on ADP's bottom line. If they can convert Employer Services clients over to their PEO segment, or grow new business bookings more rapidly, it will have a big impact on earnings.

INVESTMENT POSITIVES

- With nearly 100% of their revenue being recurring, no client making up more than 2% of revenue, and entering into 2-7 year contracts with their largest clients, it would be difficult for ADP's revenue to drop suddenly.
- ADP enjoys client retention of roughly 10 years in their Employer Services segment and 7 years in their PEO segment.
- Having very little debt and earning interest on the float of client funds, raising interest rates are nothing but good news for ADP.
- Their PEO segment has experienced double digit growth for over 5 years, and we expect this to continue. PEO growth has a large effect on ADP's bottom line.
- ADP has the unique advantage of having data on over 39 million workers worldwide and is able to offer insights from this data to both their clients and the market.

INVESTMENT NEGATIVES

- ADP is heavily tied to the health of the labor market. If the economy stumbles and job growth slows, ADP will be negatively impacted.
- The Trump Administration is continually working to repeal regulation across the board. Compliance with new regulation is key driver for new business bookings.
- Relatively low barriers to entry mean that there are frequently startups that eat away profit margins and increase competition.

VALUATION

We evaluated ADP using different valuation techniques including Discounted Cash Flow, Economic Profit, Dividend Discount Model, and a Relative P/E model. We believe that the relative P/E analysis does not accurately account for ADP's dominance in terms of market share. ADP has long issued a dividend consistent with earnings growth, however, we feel our DDM model does not fully capture the unique changes in the economy and industry such as tax code changes and interest rate hikes.

Due to the shortcomings of the relative P/E and DDM models, we have based our BUY rating primarily off of the DCF models. The stock current trades around \$114, representing an upside of 18%.

Revenues

ADP is a relatively stable company that enjoys steady streams of recurring revenue. We expect revenues to grow at roughly 7% for the next 3 years, before slowing to 5% in 2022.

We expect the Employer Services segment to grow at 4.25% for the next 5 years, which reflects both the growth of their existing clients and new business bookings.

The PEO segment is expected to grow at 12% in 2018, and steadily decline to 5% growth by 2022.

We project that interest on Funds held for Clients will grow between 20-40% a year over the next 3 years, before tapering to 6% growth in 2022. This huge growth is due to the historically low interest rates and revenues. Despite huge growth, we project that interest on Funds held for Clients will represent only 6.5% of revenue by 2022, due to them only accounting for 3.2% today.

Operating Expenses

We forecast that operating expenses, which have averaged 51.72% of revenues for the past 5 years, to rise to 53% of revenue in 2018 before remaining steady at 52%. This spike in operating expenses is based on management guidance that there will be a short-term increase in expenses as they integrate systems from recent acquisitions.

Programming Cost

We have forecasted Systems Development and Programming cost to grow at 6.5%, as ADP continues

improve their current services and seeks to add additional software services.

Selling, General, and Administrative

SG&A has averaged 22.77% of revenue for the past 5 years. We have forecasted that it will remain at 22.5% of sales moving forward.

Share Repurchases

Management has signaled that they believe share repurchases are an effective way for them to return money to shareholders and have repurchased roughly \$1 billion share each year for the last three years. With minor fluctuations, we expect that to hold true.

We also expect a steady increase in their dividend, based on management guidance.

Expenses

We have forecasted operating expenses to remain constant at 52% of revenue coming from the Employer Services and PEO segment. Operating expense as a percentage of total revenue declines over time because of the growth of interest on Funds Held for Clients, which has minimal variable cost.

We have forecasted SG&A to remain constant at 22.5% of Employer Services and PEO revenues.

Valuation Summary

We believe there is still a lot of growth in this industry, and ADP is well positioned to capitalize on that opportunity. While confident in strong growth for ADP, we also see a minimal downside for this company. In the event of an economic downturn, ADP is well positioned to continue strong. They are not overly dependent on any single client and offer a set of services that are foundational to their clients' business practices.

We recommend a BUY rating on ADP.

KEYS TO MONITOR

- One of the most important things effecting ADP is the US labor market. Keep a close eye on unemployment rates.

- New technology, such as AI and Blockchain, pose a potential threat to ADP both directly and indirectly. If AI does, in fact, start stealing jobs at an alarming rate, ADP would be adversely impacted. While both these technologies are young and misunderstood, but they are worth monitoring.
- The Fed has signaled interest rate hikes over the coming years. This will be an important source of revenue for ADP in the future.
- The competitive landscape, including the strategies of new and old competitors, will influence ADP's path forward.

and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Henry Fund may hold an investment position in the companies mentioned in this report.

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Automated Data Processing

Key Assumptions of Valuation Model

Ticker Symbol	ADP
Current Share Price	\$113.79
Current Model Date	3/1/18
Fiscal Year End	June 30
Pre-Tax Cost of Debt	3.74%
Beta	0.86
Risk-Free Rate (30-year)	3.16%
Equity Risk Premium	4.80%
Cost of Equity	7.29%
CV Growth of NOPLAT	3.61%
CV Growth of EPS	
CV ROE	3.28
Current Dividend	2.52
Marginal Tax Rate	36.70%
Effective Tax Rate	31.50%
WACC	7.92%

		Beta										
\$ 125.76		0.6	0.65	0.7	0.75	0.8	0.86	0.9	0.95	1	1.05	1.1
Market Risk Premium	2%	122.94	123.04	123.14	123.23	123.33	123.45	123.52	123.62	123.72	123.81	123.91
	2.5%	123.23	123.35	123.47	123.60	123.72	123.86	123.96	124.08	124.20	124.32	124.44
	3%	123.52	123.67	123.81	123.96	124.10	124.28	124.39	124.54	124.68	124.82	124.97
	3.5%	123.81	123.98	124.15	124.32	124.49	124.69	124.82	124.99	125.16	125.33	125.50
	4%	124.10	124.29	124.49	124.68	124.87	125.10	125.26	125.45	125.64	125.83	126.03
	4.80%	124.56	124.80	125.03	125.26	125.49	125.76	125.95	126.18	126.41	126.64	126.87
	5%	124.68	124.92	125.16	125.40	125.64	125.93	126.12	126.36	126.60	126.84	127.08
	5.5%	124.97	125.23	125.50	125.76	126.03	126.34	126.55	126.82	127.08	127.34	127.61
	6%	125.26	125.55	125.83	126.12	126.41	126.76	126.99	127.27	127.56	127.85	128.13
	6.5%	125.55	125.86	126.17	126.48	126.79	127.17	127.42	127.73	128.04	128.35	128.66
7%	125.83	126.17	126.51	126.84	127.18	127.58	127.85	128.18	128.52	128.85	129.19	

		SGA expense										
\$ 125.76		20.00%	20.50%	21.00%	21.50%	22.00%	22.50%	23.00%	23.50%	24.00%	24.50%	25.00%
CV NOPLAT Growth	2.31%	111.48	109.51	107.54	105.57	103.60	101.63	99.66	97.69	95.72	93.75	91.78
	2.61%	116.46	114.39	112.33	110.26	108.20	106.13	104.07	102.00	99.93	97.87	95.80
	2.91%	122.03	119.86	117.69	115.52	113.34	111.17	109.00	106.83	104.65	102.48	100.31
	3.21%	128.31	126.02	123.73	121.44	119.14	116.85	114.56	112.27	109.97	107.68	105.39
	3.51%	135.45	133.02	130.59	128.16	125.73	123.30	120.88	118.45	116.02	113.59	111.16
	3.81%	143.63	141.04	138.45	135.87	133.28	130.70	128.11	125.53	122.94	120.36	117.77
	4.11%	153.09	150.32	147.56	144.79	142.02	139.26	136.49	133.72	130.96	128.19	125.42
	4.41%	164.17	161.19	158.21	155.23	152.26	149.28	146.30	143.32	140.34	137.36	134.38
	4.71%	177.32	174.09	170.86	167.63	164.40	161.17	157.94	154.71	151.48	148.25	145.02
	5.01%	193.18	189.64	186.11	182.58	179.04	175.51	171.98	168.44	164.91	161.38	157.84

		CV PEO Growth										
\$ 125.76		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
Employer Services Growth CV	3.00%	85.22	88.79	92.75	97.17	102.15	107.78	114.22	121.64	130.28	140.49	152.72
	3.25%	86.96	90.71	94.90	99.58	104.87	110.89	117.79	125.78	135.16	146.31	159.79
	3.50%	88.78	92.74	97.17	102.14	107.78	114.21	121.63	130.27	140.48	152.71	167.63
	3.75%	90.71	94.89	99.58	104.87	110.88	117.78	125.77	135.15	146.30	159.77	176.39
	4.00%	92.74	97.16	102.14	107.77	114.20	121.62	130.26	140.47	152.70	167.62	186.23
	4.25%	94.89	99.57	104.86	110.87	117.77	125.76	135.14	146.29	159.76	176.37	197.37
	4.50%	97.16	102.13	107.76	114.20	121.61	130.25	140.46	152.68	167.60	186.21	210.07
	4.75%	99.57	104.85	110.87	117.76	125.76	135.13	146.27	159.74	176.35	197.34	224.71
	5.00%	102.13	107.76	114.19	121.60	130.24	140.44	152.67	167.58	186.19	210.05	241.75
	5.25%	104.85	110.86	117.75	125.75	135.12	146.26	159.73	176.33	197.32	224.68	261.83
5.50%	107.75	114.18	121.59	130.23	140.43	152.65	167.57	186.17	210.02	241.71	285.86	

		Cost of Equity										
\$ 125.76		4.79%	5.29%	5.79%	6.29%	6.79%	7.29%	7.79%	8.29%	8.79%	9.29%	9.79%
CV NOPLAT Growth	2.31%	99.69	100.08	100.47	100.86	101.24	101.63	102.02	102.41	102.80	103.18	103.57
	2.61%	104.10	104.51	104.92	105.32	105.73	106.13	106.54	106.94	107.35	107.75	108.16
	2.91%	109.04	109.47	109.90	110.32	110.75	111.17	111.60	112.02	112.44	112.87	113.29
	3.21%	114.62	115.06	115.51	115.96	116.41	116.85	117.30	117.74	118.19	118.64	119.08
	3.51%	120.95	121.42	121.89	122.36	122.83	123.30	123.78	124.25	124.72	125.19	125.66
	3.81%	128.20	128.70	129.20	129.70	130.20	130.70	131.20	131.70	132.20	132.69	133.19
	4.11%	136.59	137.13	137.66	138.19	138.73	139.26	139.79	140.32	140.85	141.38	141.91
	4.41%	146.42	146.99	147.57	148.14	148.71	149.28	149.85	150.42	150.99	151.56	152.12
	4.71%	158.09	158.70	159.32	159.94	160.55	161.17	161.79	162.40	163.02	163.63	164.24
	5.01%	172.15	172.83	173.50	174.17	174.84	175.51	176.18	176.85	177.52	178.19	178.86

		CV Treasury Rate											
		\$ 125.76	2.50%	2.60%	2.70%	2.80%	2.90%	3.00%	3.10%	3.20%	3.30%	3.40%	3.50%
CV Operating Expense	49.50%		78.33	85.18	93.80	104.96	119.99	141.32	173.96	230.14	349.69	778.66	(2,568.08)
	50.00%		76.25	82.94	91.37	102.32	117.12	138.20	170.68	227.20	350.17	823.79	(1,874.38)
	50.50%		74.18	80.72	88.97	99.70	114.25	135.08	167.40	224.28	350.97	879.89	(1,449.71)
	51.00%		72.14	78.51	86.57	97.09	111.39	131.97	164.12	221.39	352.15	951.18	(1,163.49)
	51.50%		70.11	76.32	84.20	94.50	108.55	128.87	160.84	218.51	353.76	1,044.33	(957.89)
	52.00%		68.11	74.16	81.84	91.92	105.72	125.76	157.55	215.66	355.86	1,170.62	(803.36)
	52.50%		66.12	72.01	79.50	89.35	102.89	122.67	154.27	212.84	358.53	1,350.66	(683.20)
	53.00%		64.15	69.88	77.18	86.80	100.08	119.58	150.99	210.04	361.87	1,626.68	(587.28)
	53.50%		62.20	67.76	74.87	84.27	97.29	116.50	147.71	207.27	366.00	2,100.75	(509.11)
	54.00%		60.27	65.67	72.59	81.76	94.50	113.42	144.43	204.54	371.06	3,099.30	(444.31)

		Operating Expense											
		\$ 125.76	50.75%	51.00%	51.25%	51.50%	51.75%	52.00%	52.25%	52.50%	52.75%	53.00%	53.25%
SG&A Expense	20.00%		148.21	146.64	145.08	143.52	141.95	140.39	138.83	137.27	135.72	134.16	132.61
	20.50%		145.27	143.70	142.14	140.58	139.02	137.46	135.90	134.35	132.79	131.24	129.68
	21.00%		142.33	140.76	139.20	137.64	136.09	134.53	132.97	131.42	129.87	128.32	126.77
	21.50%		139.39	137.83	136.27	134.71	133.16	131.60	130.05	128.50	126.95	125.40	123.85
	22.00%		136.46	134.90	133.34	131.79	130.23	128.68	127.13	125.58	124.03	122.49	120.94
	22.50%		133.53	131.97	130.42	128.87	127.31	125.76	124.22	122.67	121.12	119.58	118.04
	23.00%		130.60	129.05	127.50	125.95	124.40	122.85	121.31	119.76	118.22	116.68	115.14
	23.50%		127.68	126.13	124.58	123.03	121.49	119.94	118.40	116.86	115.32	113.78	112.24
	24.00%		124.76	123.22	121.67	120.12	118.58	117.04	115.50	113.96	112.42	110.89	109.35
	24.50%		121.85	120.30	118.76	117.22	115.68	114.14	112.60	111.07	109.53	108.00	106.47

		Cost of Debt											
		\$ 125.76	2.44%	2.70%	2.96%	3.22%	3.48%	3.74%	4.00%	4.26%	4.52%	4.78%	5.04%
Effective Tax Rate	23.00%		130.12	130.11	130.10	130.09	130.08	130.07	130.06	130.05	130.04	130.04	130.03
	23.50%		129.26	129.25	129.24	129.23	129.22	129.21	129.20	129.19	129.18	129.18	129.17
	24.00%		128.40	128.39	128.38	128.37	128.36	128.35	128.34	128.33	128.32	128.31	128.31
	24.50%		127.53	127.52	127.51	127.51	127.50	127.49	127.48	127.47	127.46	127.45	127.45
	25.00%		126.67	126.66	126.65	126.64	126.63	126.63	126.62	126.61	126.60	126.59	126.59
	25.50%		125.81	125.80	125.79	125.78	125.77	125.76	125.76	125.75	125.74	125.73	125.73
	26.00%		124.94	124.94	124.93	124.92	124.91	124.90	124.90	124.89	124.88	124.87	124.86
	26.50%		124.08	124.07	124.06	124.06	124.05	124.04	124.03	124.03	124.02	124.01	124.00
	27.00%		123.22	123.21	123.20	123.19	123.19	123.18	123.17	123.17	123.16	123.15	123.14
	27.50%		122.35	122.35	122.34	122.33	122.33	122.32	122.31	122.30	122.30	122.29	122.28

		% of Revenue invested in PPE											
		\$ 125.76	0.05%	0.55%	1.05%	1.55%	2.05%	2.55%	3.05%	3.55%	4.05%	4.55%	5.05%
% of Revenue invested in systems development	5.25%		190.41	176.73	164.54	153.62	143.77	134.87	126.76	119.37	112.59	106.37	100.62
	5.50%		187.17	173.86	161.99	151.34	141.73	133.02	125.09	117.85	111.20	105.09	99.46
	5.75%		183.96	171.03	159.47	149.08	139.70	131.18	123.43	116.33	109.82	103.83	98.29
	6.00%		180.80	168.23	156.97	146.84	137.68	129.36	121.77	114.83	108.45	102.57	97.13
	6.25%		177.68	165.46	154.50	144.63	135.69	127.56	120.13	113.33	107.08	101.31	95.98
	6.50%		174.61	162.73	152.06	142.43	133.71	125.76	118.50	111.85	105.72	100.06	94.83
	6.75%		171.57	160.03	149.64	140.26	131.75	123.99	116.89	110.37	104.37	98.82	93.69
	7.00%		168.58	157.36	147.26	138.11	129.81	122.22	115.28	108.90	103.02	97.59	92.55
	7.25%		165.64	154.73	144.90	135.99	127.88	120.48	113.69	107.45	101.69	96.36	91.42
	7.50%		162.74	152.14	142.57	133.89	125.98	118.75	112.11	106.00	100.36	95.14	90.30

Automated Data Processing*Revenue Decomposition*

In Millions of US dollars

	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
<i>Fiscal Years Ending June 30</i>								STEADY
Employer Services	<u>7,928</u>	<u>8,234</u>	<u>8,518</u>	<u>8,859</u>	<u>9,235</u>	<u>9,628</u>	<u>10,037</u>	<u>10,464</u>
Employer Services Growth	4.38%	3.86%	3.45%	4.00%	4.25%	4.25%	4.25%	4.25%
Interest on Funds Held for Clients	<u>378</u>	<u>377</u>	<u>397</u>	<u>478</u>	<u>669</u>	<u>878</u>	<u>1,025</u>	<u>1,086</u>
Interest on Funds Growth	1.15%	-0.11%	5.33%	20.18%	40.09%	31.24%	16.68%	5.97%
3 month Fed Rate	0.02%	0.30%	0.98%	1.75%	2.25%	2.75%	3.00%	3.00%
Funds Held for Clients	24,865.3	33,841.2	27,291.5	4,411.6	5,079.6	5,923.1	6,877.1	7,794.7
Professional Employer Organizations	<u>2,633</u>	<u>3,057</u>	<u>3,464</u>	<u>3,880</u>	<u>4,287</u>	<u>4,673</u>	<u>5,024</u>	<u>5,275</u>
PEO Growth	16.61%	16.11%	13.34%	12.00%	10.50%	9.00%	7.50%	5.00%
Total	<u>10,939</u>	<u>11,668</u>	<u>12,380</u>	<u>13,216</u>	<u>14,192</u>	<u>15,179</u>	<u>16,085</u>	<u>16,824</u>
	6.96%	6.67%	6.10%	6.76%	7.38%	6.96%	5.97%	4.59%

ADP*Income Statement*

In Millions of US dollars

STEADY

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Employer Services Revenue	7,928.3	8,234.0	8,518.1	8,858.8	9,235.3	9,627.8	10,037.0	10,463.6
Revenue from Interest on Funds Held for Clients	377.7	377.3	397.4	477.6	669.1	878.1	1,024.6	1,085.8
Professional Employer Organization Revenue	<u>2,632.5</u>	<u>3,056.5</u>	<u>3,464.3</u>	<u>3,880.0</u>	<u>4,287.4</u>	<u>4,673.3</u>	<u>5,023.8</u>	<u>5,275.0</u>
Total revenues	10,938.5	11,667.8	12,379.8	13,216.4	14,191.8	15,179.2	16,085.4	16,824.3
Cost of revenues:								
Operating expenses	5,625.3	6,025.0	6,416.1	6,751.6	7,031.8	7,436.6	7,831.6	8,184.0
Systems development & programming costs	595.4	603.7	627.5	668.3	711.7	758.0	807.3	859.7
Depreciation & amortization	<u>206.9</u>	<u>211.6</u>	<u>226.2</u>	<u>270.0</u>	<u>311.3</u>	<u>355.4</u>	<u>402.1</u>	<u>451.0</u>
Total costs of revenues	<u>6,427.6</u>	<u>6,840.3</u>	<u>7,269.8</u>	<u>7,689.9</u>	<u>8,054.8</u>	<u>8,549.9</u>	<u>9,041.0</u>	<u>9,494.8</u>
Gross Profit	4,510.9	4,827.5	5,110.0	5,526.6	6,137.0	6,629.3	7,044.4	7,329.5
Selling, general & administrative expenses	2,496.9	2,637.0	2,783.2	2,866.2	3,042.6	3,217.7	3,388.7	3,541.2
Interest expense	6.5	56.2	80.0	74.9	74.6	74.3	74.0	73.7
Total expenses	8,931.0	9,533.5	10,133.0	10,631.0	11,172.0	11,842.0	12,503.7	13,109.7
Other Income, Net	(63.2)	(100.4)	(284.3)	-	-	-	-	-
Earnings (loss) from continuing operations before income tax	2,070.7	2,234.7	2,531.1	2,585.4	3,019.8	3,337.2	3,581.7	3,714.6
Provision (benefit) for income taxes	<u>694.2</u>	<u>741.3</u>	<u>797.7</u>	<u>659.3</u>	<u>770.1</u>	<u>851.0</u>	<u>913.3</u>	<u>947.2</u>
Net earnings from continuing operations	<u>1,376.5</u>	<u>1,493.4</u>	<u>1,733.4</u>	<u>1,926.2</u>	<u>2,249.8</u>	<u>2,486.2</u>	<u>2,668.4</u>	<u>2,767.4</u>
Basic Earnings Per Share	3.07	3.27	3.87	4.36	5.15	5.76	6.28	6.63
Year End Shares Outstanding	466.4	455.7	445.0	439.5	434.0	428.5	421.1	413.6
Weighted Average Shares Outstanding	472.6	457.0	447.8	442.2	436.8	431.3	424.8	417.4
Annual Dividends Per Share	1.95	2.08	2.24	2.40	2.68	3.00	3.27	3.45

ADP

Balance Sheet

In Millions of US dollars

Steady

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Assets								
Current Assets:								
Cash & cash equivalents	1,639.3	3,191.1	2,780.4	2,632.7	2,860.0	3,134.0	3,080.5	3,113.7
Accounts receivable, net of allowance for doubtful accounts	1,546.9	1,742.8	1,703.6	1,916.4	2,057.8	2,201.0	2,332.4	2,439.5
Other current assets	731.1	701.8	883.2	877.6	942.3	1,007.9	1,068.1	1,117.1
Total current assets before funds held for clients	3,943.9	5,659.2	5,367.2	5,426.7	5,860.1	6,342.9	6,480.9	6,670.4
Funds held for clients	24,865.3	33,841.2	27,291.5	29,737.0	31,931.6	34,153.3	36,192.1	37,854.7
Total current assets	28,809.2	39,500.4	32,658.7	35,163.7	37,791.7	40,496.2	42,673.0	44,525.1
Long-term receivables, net of allowance for doubtful accounts	32.2	27.1	28.0	33.0	35.5	37.9	40.2	42.1
Property, plant & equipment, net	672.7	685.0	779.9	846.9	897.6	929.2	937.3	915.3
Property, plant & equipment, at cost	1,776.4	1,840.8	2,031.4	2,368.4	2,730.3	3,117.4	3,527.6	3,956.6
Less: accumulated depreciation	1,103.7	1,155.8	1,251.5	1,521.5	1,832.8	2,188.1	2,590.3	3,041.3
Other assets	1,270.8	1,233.5	1,352.2	1,519.9	1,632.1	1,745.6	1,849.8	1,934.8
Goodwill	1,793.5	1,682.0	1,741.0	1,741.0	1,741.0	1,741.0	1,741.0	1,741.0
Intangible assets, net	503.2	534.2	620.2	651.2	683.8	718.0	753.9	791.5
Total assets	33,110.5	43,670.0	37,180.0	39,955.7	42,781.6	45,668.0	47,995.2	49,949.7
Liabilities and Stockholders' Equity								
Current Liabilities:								
Accounts payable	194.5	152.3	149.7	162.6	174.6	186.7	197.9	206.9
Accrued expenses & other current liabilities	1,159.2	1,246.8	1,381.9	1,369.8	1,454.1	1,537.8	1,619.4	1,692.3
Accrued payroll & payroll-related expenses	627.3	616.7	562.5	656.7	697.1	737.2	776.3	811.3
Dividends payable	226.4	238.4	250.5	259.0	267.8	276.8	286.2	295.9
Short-term deferred revenues	228.6	233.2	232.9	263.0	282.4	302.1	320.1	334.8
Income taxes payable	27.2	28.2	49.0	38.8	45.3	50.1	53.7	55.7
Total current liabilities before client funds obligations	2,463.2	2,515.6	2,626.5	2,749.8	2,921.2	3,090.6	3,253.7	3,397.0
Client funds obligations	24,650.5	33,331.8	27,189.4	29,737.0	31,931.6	34,153.3	36,192.1	37,854.7
Total current liabilities	27,113.7	35,847.4	29,815.9	32,486.8	34,852.8	37,243.9	39,445.8	41,251.7
Long-term debt	9.2	2,007.7	2,002.4	1,994.4	1,986.4	1,978.4	1,970.4	1,962.4
Current portion of Long-term debt	-	2.5	7.8	7.8	7.8	7.8	7.8	7.8
Other liabilities	644.3	701.1	830.2	819.4	879.9	941.1	997.3	1,043.1
Deferred income taxes	172.1	251.1	163.1	173.9	203.1	224.4	240.8	249.8
Long-term deferred revenues	362.7	381.1	391.4	321.2	344.9	368.9	390.9	408.8
Total liabilities	28,302.0	39,188.4	33,203.0	35,795.6	38,267.0	40,756.7	43,045.2	44,915.8
Stockholders' Equity:								
Common Stock & APIC	727.2	832.0	931.7	1,032.7	1,133.7	1,234.7	1,335.8	1,436.8
Retained earnings	13,460.3	14,003.3	14,728.2	15,601.6	16,688.8	17,890.4	19,183.3	20,524.7
Treasury stock-at cost	9,118.4	10,138.6	11,303.7	12,095.0	12,941.6	13,847.5	15,093.8	16,452.2
Change in Treasury Stock	1,368.4	1,020.2	1,165.1	791.3	846.6	905.9	1,246.3	1,358.4
Accumulated other comprehensive income (loss)	(260.6)	(215.1)	(379.2)	(379.2)	(379.2)	(379.2)	(379.2)	(379.2)
Total stockholders' equity	4,808.5	4,481.6	3,977.0	4,160.12	4,501.71	4,898.40	5,046.07	5,130.03
Total liabilities and stockholders' equity	33,110.5	43,670.0	37,180.0	39,955.7	42,768.71	45,655.1	48,091.32	50,045.9

ADP*Cash Flow Statement*

In Millions of US dollars

<i>Fiscal Years Ending June 30</i>	2014	2015	2016	2017
Cash Flows from Operating Activities:				
Net earnings (loss)	1,515.9	1,452.5	1,492.5	1,733.4
Depreciation & amortization	336.2	277.9	288.6	316.1
Deferred income taxes	(50.3)	(15.3)	0.7	10.0
Stock-based compensation expense	138.4	143.2	137.6	138.9
Net pension expense	29.7	17.6	17.7	24.2
Net amortization of premiums & accretion of discounts on available-for-sale securities	94.4	100.3	94.1	85.9
Loss (gain) on sale of building	-	-	(13.9)	-
Loss (gain) on sale of divested businesses, net of tax	(10.5)	(78.4)	(21.8)	(121.4)
Other adjustments	(21.6)	6.7	25.7	37.1
Changes in operating assets and liabilities, net				
Accounts receivable	(204.0)	(175.1)	(224.6)	23.4
Other assets	(253.2)	(109.1)	(108.9)	(269.1)
Accounts payable	9.7	13.1	(15.9)	(11.6)
Accrued expenses & other liabilities	253.0	122.1	220.5	159.0
Proceeds from the sale of notes receivable	-	226.7	-	-
Operating activities of discontinued operations	0.2	(3.3)	-	-
Net cash flows from operating activities	1,821.4	1,905.6	1,859.9	2,125.9
Cash Flows from Investing Activities:				
Purchases of corporate & client funds marketable securities	(3,414.9)	(5,047.6)	(5,876.3)	(4,382.8)
Proceeds from the sales & maturities of corporate & client funds marketable securities	2,059.5	3,841.0	5,215.4	3,593.6
Net decrease (increase) in restricted cash & cash equivalents held to satisfy client funds obligations	-	(2,960.6)	(8,218.2)	6,843.6
Capital expenditures	(216.6)	(158.8)	(168.5)	(240.2)
Additions to intangibles	(151.1)	(176.7)	(217.5)	(230.4)
Acquisitions of businesses, net of cash acquired	(25.7)	(8.1)	-	(87.4)
Proceeds from the sale of property, plant, & equipment & other assets	0.4	23.6	15.7	-
Dividend received from CDK Global, Inc.	-	825.0	-	-
Cash retained by CDK Global, Inc.	-	(180.0)	-	-
Proceeds from the sale of divested business	24.4	98.6	162.2	234.0
Investing activities of discontinued operations	(0.5)	(16.7)	-	-
Net cash flows from investing activities	813.3	(3,760.3)	(9,087.2)	5,730.4
Cash Flows from Financing Activities:				
Net increase (decrease) in client funds obligations	(2,989.5)	6,074.4	8,803.3	(6,120.6)
Proceeds from debt issuance	-	-	1,998.3	-
Payments of debt	(3.3)	(2.3)	(1.5)	(2.0)
Repurchases of common stock	(667.3)	(1,557.2)	(1,155.7)	(1,259.6)
Proceeds from stock purchase plan & exercises of stock options	219.1	109.1	75.3	95.7
Dividends paid	(883.1)	(927.6)	(943.6)	(995.2)
Net proceeds from issuance of (repayments of) commercial paper	2,173.0	(2,173.0)	-	-
Other financing activities	38.8	23.4	(23.4)	-
Financing activities of discontinued operations	-	1.5	-	-
Net cash flows from financing activities	(2,358.2)	1,616.7	8,790.1	(8,281.7)
Net change in cash & cash equivalents	284.5	(344.3)	1,551.8	(410.7)

ADP*Cash Flow Statement*

In Millions of US dollars

<i>Fiscal Years Ending June 30</i>	2018E	2019E	2020E	2021E	2022E
<u>Cash Flows from Operating Activities:</u>					
Net earnings (loss)	1,926.15	2,249.76	2,486.24	2,668.37	2,767.39
+ Depreciation & Amortization	270.00	311.26	355.38	402.14	451.05
- Change in AR	(212.78)	(141.43)	(143.17)	(131.39)	(107.14)
- Change in Other Current Assets	5.63	(64.77)	(65.56)	(60.17)	(49.06)
+ Change in Funds Held for Clients	(2,445.49)	(2,194.61)	(2,221.66)	(2,038.86)	(1,662.59)
+ Change in AP	12.86	12.00	12.15	11.15	9.09
+ Change in Accrued expenses & other current liabilities	(12.12)	84.29	83.70	81.69	72.88
+ Change in Accrued payroll & payroll-related expenses	94.16	40.41	40.12	39.16	34.94
+ Change in Dividends payable	8.49	8.78	9.08	9.39	9.70
- Change in Short-term deferred revenues	30.11	19.41	19.65	18.03	14.70
+ Change in Income taxes payable	(10.22)	19.41	4.76	3.67	1.99
- Change in Client fund obligations	2,547.59	2,194.61	2,221.66	2,038.86	1,662.59
+ Change in deferred income tax liability	10.75	29.21	21.35	16.44	8.94
- Change in Other Assets	(167.69)	(112.17)	(113.55)	(104.21)	(84.98)
+ Change in Other Liabilities	<u>(10.78)</u>	<u>60.47</u>	<u>61.22</u>	<u>56.18</u>	<u>45.81</u>
Net cash flows from operating activities	2,046.65	2,516.63	2,771.35	3,010.44	3,175.31
<u>Cash Flows from Investing Activities:</u>					
- Change in Long-term receivables	(5.04)	(2.44)	(2.47)	(2.27)	(1.85)
- Capital Expenditures	(337.02)	(361.89)	(387.07)	(410.18)	(429.02)
- Change in Intangible assets	(31.01)	(32.56)	(34.19)	(35.90)	(37.69)
- Change in Long-term deferred revenues	<u>(70.24)</u>	<u>23.70</u>	<u>23.99</u>	<u>22.02</u>	<u>17.96</u>
Net cash flows from investing activities	(443.31)	(373.19)	(399.73)	(426.32)	(450.60)
<u>Cash Flows from Financing Activities:</u>					
+ Change in Long-term debt	(8.00)	(8.00)	(8.00)	(8.00)	(8.00)
+ Common Stock & APIC	101.01	101.01	101.01	(8.00)	101.01
- Dividends Paid	(1,052.79)	(1,162.53)	(1,284.66)	(1,375.44)	(1,426.01)
- Change in Treasury Stock	(791.26)	(846.65)	(905.91)	(1,246.28)	(1,358.44)
+ Change in Accumulated Other Comprehensive Income	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net cash flows from financing activities	(1,751.04)	(1,916.16)	(2,097.55)	(2,637.72)	(2,691.44)
Net change in cash & cash equivalents	(147.69)	227.28	274.07	(53.60)	33.27

ADP*Common Size Income Statement*

as percentage of sales

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Total revenues	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of revenues:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating expenses	51.43%	51.64%	51.83%	51.08%	49.55%	48.99%	48.69%	48.64%
Systems development & programming costs	5.44%	5.17%	5.07%	5.06%	5.02%	4.99%	5.02%	5.11%
Depreciation & amortization	1.89%	1.81%	1.83%	2.04%	2.19%	2.34%	2.50%	2.68%
Total costs of revenues	<u>58.76%</u>	<u>58.63%</u>	<u>58.72%</u>	58.18%	56.76%	56.33%	56.21%	56.44%
Gross Profit	41.24%	41.37%	41.28%	41.82%	43.24%	43.67%	43.79%	43.56%
Selling, general & administrative expenses	22.83%	22.60%	22.48%	21.69%	21.44%	21.20%	21.07%	21.05%
Interest expense	<u>0.06%</u>	<u>0.48%</u>	<u>0.65%</u>	0.57%	0.53%	0.49%	0.46%	0.44%
Total expenses	81.65%	81.71%	81.85%	80.44%	78.72%	78.01%	77.73%	77.92%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Earnings (loss) from continuing operations before income taxes	18.93%	19.15%	20.45%	19.56%	21.28%	21.99%	22.27%	22.08%
Provision (benefit) for income taxes	<u>6.35%</u>	<u>6.35%</u>	<u>6.44%</u>	4.99%	5.43%	5.61%	5.68%	5.63%
Net earnings from continuing operations	<u>12.58%</u>	<u>12.80%</u>	<u>14.00%</u>	14.57%	15.85%	16.38%	16.59%	16.45%

ADP*Common Size Balance Sheet*

as percentage of sales

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
<u>Assets</u>								
Current Assets:								
Cash & cash equivalents	14.99%	27.35%	22.46%	19.92%	20.15%	20.65%	19.15%	18.51%
Accounts receivable, net of allowance for doubtful accounts	14.14%	14.94%	13.76%	14.50%	14.50%	14.50%	14.50%	14.50%
Other current assets	<u>6.68%</u>	<u>6.01%</u>	<u>7.13%</u>	<u>6.64%</u>	<u>6.64%</u>	<u>6.64%</u>	<u>6.64%</u>	<u>6.64%</u>
Total current assets before funds held for clients	36.06%	48.50%	43.35%	41.06%	41.29%	41.79%	40.29%	39.65%
Funds held for clients	<u>227.32%</u>	<u>290.04%</u>	<u>220.45%</u>	<u>225.00%</u>	<u>225.00%</u>	<u>225.00%</u>	<u>225.00%</u>	<u>225.00%</u>
Total current assets	263.37%	338.54%	263.81%	266.06%	266.29%	266.79%	265.29%	264.65%
Long-term receivables, net of allowance for doubtful accounts	0.29%	0.23%	0.23%	0.25%	0.25%	0.25%	0.25%	0.25%
Property, plant & equipment, net	<u>6.15%</u>	<u>5.87%</u>	<u>6.30%</u>	<u>6.41%</u>	<u>6.32%</u>	<u>6.12%</u>	<u>5.83%</u>	<u>5.44%</u>
Property, plant & equipment, at cost	16.24%	15.78%	16.41%	17.92%	19.24%	20.54%	21.93%	23.52%
Less: accumulated depreciation	10.09%	9.91%	10.11%	11.51%	12.91%	14.42%	16.10%	18.08%
Other assets	11.62%	10.57%	10.92%	11.50%	11.50%	11.50%	11.50%	11.50%
Goodwill	16.40%	14.42%	14.06%	13.17%	12.27%	11.47%	10.82%	10.35%
Intangible assets, net	<u>4.60%</u>	<u>4.58%</u>	<u>5.01%</u>	<u>4.93%</u>	<u>4.82%</u>	<u>4.73%</u>	<u>4.69%</u>	<u>4.70%</u>
Total assets	<u>302.70%</u>	<u>374.28%</u>	<u>300.33%</u>	<u>302.32%</u>	<u>301.45%</u>	<u>300.86%</u>	<u>298.38%</u>	<u>296.89%</u>
<u>Liabilities and Stockholders' Equity</u>								
Current Liabilities:								
Accounts payable	1.78%	1.31%	1.21%	1.23%	1.23%	1.23%	1.23%	1.23%
Accrued expenses & other current liabilities	10.60%	10.69%	11.16%	10.36%	10.25%	10.13%	10.07%	10.06%
Accrued payroll & payroll-related expenses	5.73%	5.29%	4.54%	4.97%	4.91%	4.86%	4.83%	4.82%
Dividends payable	2.07%	2.04%	2.02%	1.96%	1.89%	1.82%	1.78%	1.76%
Short-term deferred revenues	2.09%	2.00%	1.88%	1.99%	1.99%	1.99%	1.99%	1.99%
Income taxes payable	<u>0.25%</u>	<u>0.24%</u>	<u>0.40%</u>	<u>0.29%</u>	0.32%	0.33%	0.33%	0.33%
Total current liabilities before client funds obligations	22.52%	21.56%	21.22%	20.81%	20.58%	20.36%	20.23%	20.19%
Client funds obligations	<u>225.36%</u>	<u>285.67%</u>	<u>219.63%</u>	<u>225.00%</u>	225.00%	225.00%	225.00%	225.00%
Total current liabilities	247.87%	307.23%	240.84%	245.81%	245.58%	245.36%	245.23%	245.19%
Long-term debt	<u>0.08%</u>	<u>17.21%</u>	<u>16.17%</u>	<u>15.09%</u>	14.00%	13.03%	12.25%	11.66%
Current portion of Long-term debt	0.00%	0.02%	0.06%	0.06%	0.05%	0.05%	0.05%	0.05%
Other liabilities	5.89%	6.01%	6.71%	6.20%	6.20%	6.20%	6.20%	6.20%
Deferred income taxes	1.57%	2.15%	1.32%	1.32%	1.43%	1.48%	1.50%	1.48%
<u>Long-term deferred revenues</u>	<u>3.32%</u>	<u>3.27%</u>	<u>3.16%</u>	<u>2.43%</u>	2.43%	2.43%	2.43%	2.43%
Total liabilities	258.74%	335.87%	268.20%	270.84%	269.64%	268.50%	267.60%	266.97%
Stockholders' Equity:								
Common stock	6.65%	7.13%	7.53%	7.81%	7.99%	8.13%	8.30%	8.54%
Retained earnings	123.05%	120.02%	118.97%	118.05%	117.59%	117.86%	119.26%	121.99%
Treasury stock-at cost	83.36%	86.89%	91.31%	91.51%	91.19%	91.23%	93.84%	97.79%
Accumulated other comprehensive income (loss)	<u>-2.38%</u>	<u>-1.84%</u>	<u>-3.06%</u>	<u>-2.87%</u>	-2.67%	-2.50%	-2.36%	-2.25%
Total stockholders' equity	43.96%	38.41%	32.12%	31.48%	31.72%	32.27%	31.37%	30.49%
Total liabilities and stockholders' equity	<u>302.70%</u>	<u>374.28%</u>	<u>300.33%</u>	<u>302.32%</u>	<u>301.36%</u>	<u>300.77%</u>	<u>298.98%</u>	<u>297.46%</u>

Automated Data Processing*Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models*

Key Inputs:

CV Growth	3.61%
CV ROIC	87.01%
WACC	7.92%
Cost of Equity	7.29%

<i>Fiscal Years Ending June 30</i>	2018E	2019E	2020E	2021E	2022E
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DCF Model

Number of Periods	1	2	3	4	5
NOPLAT	2,011.93	2,335.97	2,572.94	2,755.60	2,855.20
Change in Invested Capital	291.80	172.42	168.37	134.40	85.42
FCF	1,720.13	2,163.55	2,404.57	2,621.20	3,284.22
CV				63,521.64	
Total FCF	1,720.13	2,163.55	2,404.57	66,142.85	
PV of FCF	1,593.86	1,857.55	1,912.93	48,756.43	
Value of Operating Assets	54,120.77				

Non Operating Assets & Liabilities, Debt, Other

Excess Cash	2,512.66
Long-term receivables	28.00
PV of Operating Leases	(388.73)
Total Debt	(2,002.40)
PV of ESOP	(484.76)

Value of Equity 53,785.55

Shares Outstanding	445.00
Share Price	120.87
Partial Year Adjustment	125.75

EP Model

Number of Periods	1	2	3	4	5
Economic Profit	1,812.71	2,113.64	2,336.94	2,506.26	2,595.22
CV				60,240.16	
Total EP	1,812.71	2,113.64	2,336.94	62,746.42	
PV of EP	1,679.64	1,814.70	1,859.13	46,252.80	
Total PV of EP	51,606.27				
Initial Invested Capital	2,514.50				
Value of Operations	54,120.77				

Non Operating Assets & Liabilities, Debt, Other

Excess Cash	2,512.66
Long-term receivables	28.00
PV of Operating Leases	(388.73)
Total Debt	(2,002.40)
PV of ESOP	(484.76)

Value of Equity 53,785.55

Shares Outstanding	445.00
Share Price	120.87
Partial Year Adjustment	125.75

Automated Data Processing
Value Driver Estimation

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Marginal Tax Rate	<u>35.60%</u>	<u>35.60%</u>	<u>36.70%</u>	<u>24.00%</u>	<u>24.00%</u>	<u>24.00%</u>	<u>24.00%</u>	<u>24.00%</u>
EBITA								
Total revenues	10,939	11,668	12,380	13,216	14,192	15,179	16,085	16,824
Operating expenses	(5,625)	(6,025)	(6,416)	(6,752)	(7,032)	(7,437)	(7,832)	(8,184)
Systems development & programming costs	(595)	(604)	(628)	(668)	(712)	(758)	(807)	(860)
Depreciation & amortization (no Goodwill)	(207)	(212)	(226)	(270)	(311)	(355)	(402)	(451)
Operating Lease Interest	10.88	16.25	15.61	14.50	14.50	14.50	14.50	14.50
Selling, general & administrative expenses	(2,497)	(2,637)	(2,783)	(2,866)	(3,043)	(3,218)	(3,389)	(3,541)
EBITA	2,025	2,207	2,342	2,675	3,109	3,426	3,670	3,803
Adjusted Taxes								
Provision for Income Taxes	694.2	741.3	797.7	659.29	770.05	851.00	913.34	947.23
Tax Shield on Operating Lease Interest	10.69	20.13	20.66	19.00	19.00	19.00	19.00	19.00
Shield from Interest Expense	2	20	29	18	18	18	18	18
Tax gain on other income	(22)	(36)	(104)	-	-	-	-	-
Total Adjusted Taxes	684.71	745.69	743.38	696.26	806.95	887.83	950.09	983.91
Deferred Taxes								
Deferred Tax Assets	360.2	438.8	478.3	499.44	521.52	544.57	568.64	593.77
Deferred Tax Liabilities	494.4	589.6	548.0	535.78	523.83	512.15	500.73	489.56
Total Deferred Taxes	(134)	(151)	(70)	(36)	(2)	32	68	104
Change in Deferred Taxes	85.2	-16.6	81.1	33.36	34.02	34.73	35.49	36.30
NOPLAT = EBITA - Adjusted Taxes + Change in DT								
NOPLAT	1,425.37	1,444.46	1,680.13	2,011.93	2,335.97	2,572.94	2,755.60	2,855.20
Growth of NOPLAT	14.82%	1.34%	16.32%	19.75%	16.11%	10.14%	7.10%	3.61%
Calculation of Invested Capital								
Cash	1639.3	3191.1	2780.4	2,632.71	2,859.98	3,134.05	3,080.45	3,113.72
Cash as percentage of Revnue	2%	2%	2%	2%	2%	2%	2%	2%
Normal Cash	218.77	233.36	247.60	264.33	283.84	303.58	321.71	336.49
accounts receivable	1,547	1,743	1,704	1,916	2,058	2,201	2,332	2,440
Funds held for clients	24,865	33,841	27,292	29,737	31,932	34,153	36,192	37,855
Other Current Assets	731.1	701.8	883.2	877.6	942.3	1,007.9	1,068.1	1,117.1
Current Operating Assets	27,362	36,519	30,126	32,795	35,216	37,666	39,914	41,748
Total Current Liabilities	27,114	35,847	29,816	32,487	34,853	37,244	39,446	41,252
Working Capital	248	672	310	309	363	422	468	496
Net PPE	673	685	780	847	898	929	937	915
LT Operating Assets								
Net Intangible Assets	503	534	620	651	684	718	754	792
Long-term Receivables	32	27	28	33	35	38	40	42
Other Assets	1,271	1,234	1,352	1,520	1,632	1,746	1,850	1,935
PV Operating Lease	291	435	418	440	450	460	470	480
Total LT Operating Assets	2,097	2,229	2,418	2,644	2,801	2,962	3,114	3,248
LT Operating Liabilities								
Other Long-term Liabilities	644	701	830	819	880	941	997	1,043
Deferred Revenue	172	251	163	174	203	224	241	250
Total LT Operating Liabilities	816	952	993	993	1,083	1,166	1,238	1,293
Invested Capital	2,202	2,634	2,514	2,806	2,979	3,147	3,281	3,367
ROIC, FCF, EP								
ROIC	-682%	66%	64%	80.0%	83.2%	86.4%	87.6%	87.0%
FCF	(985.47)	1,012.28	1,799.55	1,720.13	2,163.55	2,404.57	2,621.20	2,769.78
EP	1441.94	1270.02	1471.46	1812.71	2113.64	2336.94	2506.26	2595.22

Automated Data Processing

Weighted Average Cost of Capital (WACC) Estimation

	Year 0	2018E	2019E	2020E	2021E	2022E
Risk Free	3.16%	3.75%	4.00%	4.25%	4.50%	4.50%
Risk Premium	4.80%	4.50%	4.50%	4.50%	4.50%	4.50%
Beta	0.86	0.86	0.86	0.86	0.86	0.86
Cost of Equity	7.29%	7.62%	7.87%	8.12%	8.37%	8.37%
Debt Rating	AA	AA	AA	AA	AA	AA
Default Spread	0.58%	0.58%	0.58%	0.58%	0.58%	0.58%
Pre-Tax Cost of Debt	3.74%	4.33%	4.58%	4.83%	5.08%	5.08%
Tax Rate	24.00%	24%	24%	24%	24%	24%
After-Tax Cost of Debt	2.84%	3.29%	3.48%	3.67%	3.86%	3.86%
Cost of Preferred	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of shares	445.00					
Price per share	113.79					
	50,636.55					
Number of bonds	2.00					
Price per bond	996.33					
	1,992.65					
MV Weight of Equity	96%	96%	96%	96%	96%	96%
MV Weight of Debt	4%	4%	3%	3%	2%	2%
MV Weight of Pfd	0%	0%	0%	0%	0%	0%
Forward WACC	7.12%	7.46%	7.68%	7.92%	8.13%	8.13%

Automated Data Processing*Dividend Discount Model (DDM) or Fundamental P/E Valuation Model*

<i>Fiscal Years Ending June 30</i>	<i>2018E</i>	<i>2019E</i>	<i>2020E</i>	<i>2021E</i>	<i>2022E</i>
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EPS	\$ 4.36	\$ 5.15	\$ 5.76	\$ 6.28	\$ 6.63
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Key Assumptions

CV growth	3.61%
CV ROE	3.28
Cost of Equity	7.29%

Future Cash Flows

P/E Multiple (CV Year)					26.92
EPS (CV Year)					6.63
Future Stock Price					178.52
Dividends Per Share	2.40	2.68	3.00	3.27	
Future Cash Flows	2.40	2.68	3.00	3.27	178.52
Discounted Cash Flows	2.23	2.33	2.43	2.47	125.58
Intrinsic Value	\$ 132.80				
Partial Year Adjustment	\$ 138.16				

Automated Data Processing*Relative Valuation Models*

Ticker	Company	Price	EPS		P/E 18	P/E 19	Est. 5yr EPS gr.	PEG 18	PEG 19
			2018E	2019E					
INTU	Intuit	\$171.78	\$4.28	\$5.01	40.1	34.3	15.1	2.66	2.27
PAYX	Paychex	\$66.47	\$2.39	\$2.76	27.8	24.1	9.0	3.09	2.68
TNET	TriNet Group	\$41.85	\$1.78	\$2.10	23.5	19.9	7.5	3.13	2.66
NSP	Insperity	\$66.75	\$2.72	\$3.25	24.5	20.5	18.0	1.36	1.14
			Average						
					29.0	24.7		2.6	2.2

ADP Automated Data Processing \$113.79 4.36 5.15 26.1 22.1 11.371 2.3 1.9

Implied Value:

Relative P/E (EPS18) \$ 126.30
Relative P/E (EPS19) \$ 127.28
PEG Ratio (EPS18) \$ 126.90
PEG Ratio (EPS19) \$ 128.09

Automated Data Processing

Ratios

<i>Fiscal Years Ending June 30</i>	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Liquidity								
Current Ratio (Current Assets/ Current Liabilities)	1.06	1.10	1.10	1.08	1.08	1.09	1.08	1.08
Cash Ratio (Cash/ Current Liabilities)	0.98	1.03	1.01	1.00	1.00	1.00	1.00	0.99
Operating Cash Flow Ratio (Cash from Ops/ Current Liab)	0.77	0.74	0.81	0.74	0.86	0.90	0.93	0.93
Activity Ratio								
Funds for clients/ revenue	2.27	2.90	2.20	2.25	2.25	2.25	2.25	2.25
Asset Turnover Ratio (Sales/ Average Total Assets)	0.34	0.30	0.31	0.34	0.34	0.34	0.34	0.34
Receivables Turnover Ratio (Sales/ Average Total Receivab)	7.18	7.09	7.18	7.30	7.14	7.13	7.10	7.05
Financial Leverage								
Debt Ratio (Total Debt/ Total Assets)	0.00	0.05	0.05	0.05	0.05	0.04	0.04	0.04
Debt-to-Equity Ratio (Total Debt/ Total Equity)	0.00	0.45	0.50	0.48	0.44	0.40	0.39	0.38
Equity Ratio (Total Equity/ Total Assets)	0.15	0.10	0.11	0.10	0.11	0.11	0.11	0.10
Profitability								
Return of Assets (Net Income/ Assets)	33%	27%	33%	33%	33%	33%	34%	34%
Return of Equity (Net Income/ Total Equity)	227%	260%	311%	318%	315%	310%	319%	328%
Profit Margin (Net Income/ Sales)	13%	13%	14%	15%	16%	16%	17%	16%
Gross Margin (Sales - COGS)/Sales	49%	48%	48%	49%	50%	51%	51%	51%
Payout								
Dividend Payout Ratio (Dividend / EPS)	64%	64%	58%	55%	52%	52%	52%	52%
Total Payout Ratio (Dividend + Repurchases)/Net Income	181%	141%	130%	96%	89%	88%	98%	101%

Present Value of Operating Lease Obligations (2017)

Fiscal Years Ending June 30	Operating Leases
2017	105.4
2018	85.4
2019	85.4
2020	43.55
2021	43.55
Thereafter	110.5
Total Minimum Payments	473.8
Less: Interest	56
PV of Minimum Payments	418

Capitalization of Operating Leases

Pre-Tax Cost of Debt	3.74%
Number Years Implied by Year 6 Payment	2.5

Year	Lease Commitment	PV Lease Payment
1	105.4	101.6
2	85.4	79.4
3	85.4	76.5
4	43.55	37.6
5	43.55	36.2
6 & beyond	43.55	86.2
PV of Minimum Payments		417.5

Present Value of Operating Lease Obligations (2016)

Fiscal Years Ending June 30	Operating Leases
2016	106.2
2017	92.5
2018	92.5
2019	49.55
2020	49.55
Thereafter	100.8
Total Minimum Payments	491.1
Less: Interest	57
PV of Minimum Payments	435

Capitalization of Operating Leases

Pre-Tax Cost of Debt	3.74%
Number Years Implied by Year 6 Payment	2.0

Year	Lease Commitment	PV Lease Payment
1	106.2	102.4
2	92.5	86.0
3	92.5	82.9
4	49.55	42.8
5	49.55	41.2
6 & beyond	49.55	79.4
PV of Minimum Payments		434.6

Present Value of Operating Lease Obligations (2015)

Fiscal Years Ending 12.31.2014	Operating Leases
2015	89.6
2016	72.1
2017	72.1
2018	33.35
2019	33.35
Thereafter	20.4
Total Minimum Payments	320.9
Less: Interest	30
PV of Minimum Payments	291

Capitalization of Operating Leases

Pre-Tax Cost of Debt	3.74%
Number Years Implied by Year 6 Payment	1.0

Year	Lease Commitment	PV Lease Payment
1	89.6	86.4
2	72.1	67.0
3	72.1	64.6
4	33.35	28.8
5	33.35	27.8
6 & beyond	20.4	16.4
PV of Minimum Payments		290.9

Effects of ESOP Exercise and Share Repurchases on Common Stock Balance Sheet Account and Number of Shares Outstanding

Number of Options Outstanding (shares):	9.04
Average Time to Maturity (years):	<u>6.23</u>
Expected Annual Number of Options Exercised:	1.45

Current Average Strike Price:	\$ 69.61
Cost of Equity:	7.29%
Current Stock Price:	\$113.79

	<u>2018E</u>	<u>2019E</u>	<u>2020E</u>	<u>2021E</u>	<u>2022E</u>
Increase in Shares Outstanding:	1.45	1.45	1.45	1.45	1.45
Average Strike Price:	\$ 69.61	\$ 69.61	\$ 69.61	\$ 69.61	\$ 69.61
Increase in Common Stock Account:	101	101	101	101	101
Change in Treasury Stock	791	847	906	1,246	1,358
Expected Price of Repurchased Shares:	\$ 113.79	\$ 122.08	\$ 130.98	\$ 140.53	\$ 150.77
Number of Shares Repurchased:	7	7	7	9	9
Shares Outstanding (beginning of the year)	445.0	439	434	429	421
Plus: Shares Issued Through ESOP	1.5	1	1	1	1
Less: Shares Repurchased in Treasury	7.0	7	7	9	9
Shares Outstanding (end of the year)	439.5	434	429	421	414

VALUATION OF OPTIONS GRANTED IN ESOP

Ticker Symbol	ADP
Current Stock Price	\$113.79
Risk Free Rate	3.16%
Current Dividend Yield	2.21%
Annualized St. Dev. of Stock Returns	35.14%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Jul-16	4.87	65.00	5.40	\$ 53.78	\$ 262
Jul-17	4.17	75.00	7.20	\$ 50.40	\$ 210
Total	9	\$ 69.61	6.23	\$ 64.62	\$ 472